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TO: Sarvamangala Devi **Art Unit:** 1645 **Location:** REM-3C18 **Serial Number:** 10/699810 **Tuesday, November 22, 2005**	**From:** Beverly Shears **Location:** Biotech-Chem Library REM 1A54 **Phone:** 571-272-2528 beverly.shears@uspto.gov

Search Notes

STIC-Biotech/ChemLib 171187

From: Devi, Sarvamangala
Sent: Thursday, November 10, 2005 7:26 AM
To: STIC-Biotech/ChemLib
Cc: Shears, Beverly
Subject: 10/699,810

Please ask Ms. Beverly Shears to perform this search.

Please perform a text search for the following claims. Please include an inventors' name search for Tsuneo Hattori, Yukinori Takahashi, and Yoshihiro Tachikawa. Please include all databases that retrieve Japanese patents and Japanese NPL.

Claim 1. A method of increasing disease resistance (innate immunity) in animals and humans comprising administrating to the animal or human an effective amount of an immunostimulator complising swine plasma, swine plasma albumin, or swine plasma albumin-derived peptide in a dose ranging between 1-3000 mg/kg, 1-300mg/kg, 5-100 mg/kg, 30-1000mg/kg, 70-500mg/kg, or 100-3000 mg/kg.

Claim 2. The method according to claim 1 wherein the swine plasma is mixed with fine-powdered Crustacea (prawns, lobsters, crabs or shrimps) or crust of Crustacea.

Alternate terms for swine plasma/albumin: porcine plasma, porcine plasma albumin, porcine blood meal, and pepsin-treated or pepsin-hydrolyzed swine plasma powder. Commercially known as AP 920 or AP920™.

Thanx.

S. DEVI, Ph.D.
Primary Examiner
AU 1645
Rems - 3C18

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TQ-15(2)-96

Devi, S.
10/699810

FILE 'REGISTRY' ENTERED AT 11:34:38 ON 22 NOV 2005
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* The CA roles and document type information have been removed from *
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- key terms

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                E AP 920/CN 5
L1            1 S E3
                E AP920/CN 5
                E "PORICNE PLASMA ALBUMIN"/CN 5
                E "PORICNE PLASMA"/CN 5
                E "SWINE PLASMA ALBUMIN"/CN 5
                E "SWINE PLASMA"/CN 5
                E "ALBUMIN, PORCINE"/CN 5
                E "ALBUMIN, SWINE"/CN 5
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FILE COVERS 1907 - 22 Nov 2005 VOL 143 ISS 22
FILE LAST UPDATED: 21 Nov 2005 (20051121/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

L1 1 SEA FILE=REGISTRY ABB=ON PLU=ON "AP 920"/CN
L2 11268 SEA FILE=HCAPLUS ABB=ON PLU=ON (PORCINE OR SWINE OR PIG OR HOG)(S)(PLASMA OR BLOOD MEAL OR ALBUMIN) OR L1 OR AP920 OR AP 920
L4 15 SEA FILE=HCAPLUS ABB=ON PLU=ON (L2 OR (SBM OR PBM)(S)BLOOD MEAL) AND (CRUSTACEA? OR PRAWN OR LOBSTER OR CRAB OR SHRIMP OR OSTRACOD? OR SHELLFISH OR SHELL FISH OR HOMARIDAE OR HOMARUS OR NEPHROPIDAE OR BRACHYURA OR PAGURUS OR ANOMURA OR DECAPODA OR PENAEUS)

L4 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 26 Apr 2002
ACCESSION NUMBER: 2002:315372 HCAPLUS
DOCUMENT NUMBER: 136:319392
TITLE: Immunostimulator for animals and humans, and method of preventing animal and human infectious diseases and cancer
INVENTOR(S): Hattori, Tsuneo; Takahashi, Yukinori; Tachikawa, Yoshihiro
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002048608	A1	20020425	US 2001-808840		20010315
US 2004197342	A1	20041007	US 2003-699810		20031103
PRIORITY APPLN. INFO.:			US 2000-191211P	P	20000322
			US 2001-808840	A1	20010315

AB The goal of the present invention is to provide substances to prevent diseases by activating inherently possessed functions, for cultured fishes and **shellfishes** and livestock with tendency of decreased immune function due to densely populated breeding environment, and for humans with tendency of easily lowered immune functions due to complicated social structures and aging. The present invention expresses marked effect in preventing infection and cancer by administering appropriate dose of **swine plasma**, **swine plasma albumin**, peptides isolated from **swine plasma** and **swine plasma albumin**, and **swine plasma** mixture, among others including fine powder of **Crustacea**

(including crust of **Crustacea**), to activate immune function of **Crustacea**, Pisces, Aves, Mammals, and humans.

L4 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 07 Jul 1999
ACCESSION NUMBER: 1999:415029 HCAPLUS
DOCUMENT NUMBER: 131:82214
TITLE: Determination of arsenic, antimony, bismuth, selenium and tellurium by hydride generation inductively coupled plasma mass spectrometry using ethanol as signal enhancer
AUTHOR(S): Li, Bing; Wu, Lie-Ping; Yin, Ming; Wang, Xiao-Ru
CORPORATE SOURCE: Institute of Rock and Mineral Analysis, Chinese Academy of Geological Sciences, Beijing, 100037, Peop. Rep. China
SOURCE: Yankuang Ceshi (1999), 18(2), 101-110
CODEN: YACEEK; ISSN: 0254-5357
PUBLISHER: Dizhi Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB A continuous flow hydride generation system combined with inductively coupled plasma mass spectrometer (HG-ICP-MS) for the determination of As, Sb, Bi, Se and Te has been developed. A modified Meinhard nebulizer-barrel baffle glass spray chamber system was used as gas-liquid phase separator. The device effectively eliminates the polyat. interferences from chloride vapor on As and Se. The sensitivity of analytes can be significantly enhanced by adding ethanol to the tetrahydroborate reductant. The use of Ge as an internal standard improved the precision and accuracy. The detection limits of the method for As, Sb, Bi, Se and Te were 71, 10, 9, 6, 8 ng/L (3 times the standard deviation of the blank), resp. The precisions for ten replicate detns. were 1.2%.apprx.2.4% RSD for the analytes at the 10 μg/L level. Two determination methods, with and without preredn. step, were compared. Thiourea and ascorbic acid were used as prereductants for As and Sb. The validity of the method was examined by analyzing several geol. and biol. reference materials. Results for most analytes were in good agreement with certified values.

L4 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 15 Jun 1996
ACCESSION NUMBER: 1996:346762 HCAPLUS
DOCUMENT NUMBER: 125:27778
TITLE: Determination of trace heavy metals in biological samples by inductively coupled plasma atomic emission spectrometry after extraction with 1,5-bis(di-2-pyridylmethylene)thiocarbonohydrazide
AUTHOR(S): Vereda Alonso, E.; Garcia de Torres, A.; Cano Pavon, J. M.
CORPORATE SOURCE: Dep. Anal. Chem., Fac. Sci., Univ. Malaga, Malaga, 29071, Spain
SOURCE: Talanta (1996), 43(3), 493-501
CODEN: TLNTA2; ISSN: 0039-9140
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A sensitive inductively-coupled plasma atomic emission spectrometric sequential method for the determination of trace heavy metals (cadmium, cobalt, copper and nickel) in biol. samples after extraction of the metals

into iso-Bu Me ketone (IBMK) containing 1,5-bis(di-2-pyridylmethylene)thiocarbonohydrazide (DPTH) is described. A systematic study was made to determine the optimum conditions for extraction of the metals into IBMK. The complexes formed are quite soluble in IBMK, so much so that this allows the use of aqueous-to-organic phase volume ratios of up to 40 and hence the determination of concns. down to 40 times lower than those afforded by the direct non-extractive method. The method has been used for the determination of these elements in various biol. materials with good results.

L4 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 05 Sep 1987
ACCESSION NUMBER: 1987:473358 HCAPLUS
DOCUMENT NUMBER: 107:73358
TITLE: Method for measuring the plasma levels of an inhibitor of sodium-potassium-dependent ATPase associated with hypertension and use in diagnosis
INVENTOR(S): Hamlyn, John M.; Blaustein, Mordecai P.; Kowarski, A. Avinoam
PATENT ASSIGNEE(S): University of Maryland, USA
SOURCE: U.S., 13 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4665019	A	19870512	US 1983-528009	19830831
PRIORITY APPLN. INFO.:			US 1983-528009	19830831

AB The Na+ pump inhibitor (ouabain-sensitive Na+,K+-ATPase inhibitor) (I) activity is measured biochem. in deproteinized plasma of hypertensive patients as a means of diagnosing hypertension, monitoring antihypertensive therapy, and monitoring the I activity during purification of I. Hypertensive patients showed a correlation between mean arterial blood pressure and plasma Na+,K+-ATPase inhibition; the maximum inhibition observed was 14%.

L4 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 07 Mar 1987
ACCESSION NUMBER: 1987:66218 HCAPLUS
DOCUMENT NUMBER: 106:66218
TITLE: Application of **swine blood meal** for **shrimp** feed preparation. (I) The relationship between the proteolytic enzymes in the digestive tract of grass **shrimp** and different feed proteins
AUTHOR(S): Yeh, Chuan Mei; Tsen, Hau Yang
CORPORATE SOURCE: Dep. Food Sci., Natl. Chung Hsing Univ., Taichung, Taiwan
SOURCE: Zhongguo Nongye Huaxue Huizhi (1985), 23(3-4), 328-38
CODEN: CKNHAA; ISSN: 0578-1736
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB **Swine blood meal** and other protein sources were substituted for white fish meal in the feed of the grass **shrimp Penaeus** monodon. In vitro digestion tests of various proteins with proteases from the **shrimp**'s digestive tract showed that casein is hydrolyzed most efficiently, followed in order by **swine blood meal**, soybean meal, the 4 formulated feeds from the Animal Industry Research Institute (with 9% **swine blood meal** replacing white fish meal), and, lastly, white fish meal. Although **swine blood meal** is easily hydrolyzed, its efficiency of absorption and meat conversion may not be high, nor its amino acid composition appropriate. However, mixing **swine blood meal** with other protein sources may provide a balanced feed. **Swine blood meal** may thus be included in **shrimp** feed.

L4 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 17 May 1986
ACCESSION NUMBER: 1986:167171 HCAPLUS
DOCUMENT NUMBER: 104:167171
TITLE: Application of **swine blood meal** for **shrimp** feed preparation. (I) A study on the relationship between the proteolytic enzymes in the digestive tracts of grass **prawn** and different feed proteins
AUTHOR(S): Yeh, Chuan Mei; Tsen, Hau Yang
CORPORATE SOURCE: Dep. Food Sci., Natl. Chung Hsing Univ., Taichung, Taiwan
SOURCE: Zhongguo Nongye Huaxue Huizhi (1985), 23(3-4), 328-38
CODEN: CKNHAA; ISSN: 0578-1736
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Grass **Shrimp** (**Penaeus** monodon) is one of the main cultivated **shrimps** in Taiwan. The main component of its feed is protein which also is the main factor responsible for the growth rate of **shrimp**. **Swine blood meal** (**SBM**), a byproduct of the pork industry, is a cheap potential protein source. Using SBM as a substitute for white fish meal (WFM) may reduce the feed expense for **shrimp** cultivation. The digestive tracts of grass **shrimp** were assayed for the activities of different proteolytic enzymes. There were high trypsin [9002-07-7] and carboxypeptidase B [9025-24-5] activities, but low chymotrypsin [9004-07-3] and carboxypeptidase A [11075-17-5] activities. The optimum pH of crude enzyme is 6.5, of both casein hydrolytic enzyme and trypsin is 7.5, and of carboxypeptidase B are 4.5 and 6.5. The optimum temps. for one carboxypeptidase B is 40° and for all the others are 65°. The most unstable enzyme is carboxypeptidase B with optimum pH of 4.5. The in vitro digestion test of various protein isolates showed that casein is the most efficient substrate to be hydrolyzed by grass **shrimp** protease [9001-92-7], followed by SBM, soybean meal, and the 4 formulated feeds from the Animal Industry Research Institute (0-9% SBM substituting for WFM), and WFM. Although SBM is easily hydrolyzed by grass **shrimp** protease, its efficiency of absorption and meat conversion may not be as effective and the amino acid composition may not be balanced for **shrimp** requirements. Mixing SBM with other protein sources

may make it amino acid balanced, and thus, SBM may be usable as a **shrimp** feed preparation

L4 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 12 May 1984
ACCESSION NUMBER: 1972:1090 HCAPLUS
DOCUMENT NUMBER: 76:1090
TITLE: Transamidating enzymes. I. Rapid chromatographic assays
AUTHOR(S): Lorand, L.; Campbell, L. K.
CORPORATE SOURCE: Dep. Chem., Northwest. Univ., Evanston, IL, USA
SOURCE: Analytical Biochemistry (1971), 44(1), 207-20
CODEN: ANBCA2; ISSN: 0003-2697
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Quant. chromatog. methods were developed for measuring the activities of transamidases that catalyze exchange reactions on γ-carbonyl groups of glutamine residues. Radioactive histamine, putrescine, and the fluorescent monodansylcadaverine were used as amine donors. Glutamine-containing acceptor substrates varied from the small peptide benzyloxycarbonylglutaminylglycine to α-casein and β-lactoglobulin. The transamidases studied were obtained from liver (guinea **pig** liver transglutaminase), muscle (**lobster** muscle transpeptidase or tissue coagulin), and blood **plasma** (fibrinoligase or thrombin-activated fibrin-stabilizing factor).

L4 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 22 Apr 2001
ACCESSION NUMBER: 1965:412506 HCAPLUS
DOCUMENT NUMBER: 63:12506
ORIGINAL REFERENCE NO.: 63:2235d-h,2236a
TITLE: Suppression of immunological responses during the induction of immune paralysis with unrelated antigens
AUTHOR(S): Liacopoulos, P.
CORPORATE SOURCE: Natl. Inst. of Allergy & Infectious Diseases, Bethesda, MD
SOURCE: Texas Reports on Biology and Medicine (1965), 23(1), 63-80
CODEN: TRBMAV; ISSN: 0040-4675
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Adult guinea **pigs** were injected intravenously or intraperitoneally each day with large doses of bovine serum **albumin** (BSA), and at various intervals were injected with single doses of rabbit γ-globulin (RGG) or egg **albumin** (EA). Treatment of animals with large amts. of BSA consistently inhibited antibody production to EA or RGG, the effect increasing with increasing time between injection of EA or RGG and BSA. Intravenous EA or RGG did not show antibody formation after day 10, whereas if given subcutaneously, antibody production was not seen after day 18. Inhibition of antibody production toward the subsequently injected antigens appeared to be permanent in that guinea pigs tested 2 months following the injection of these antigens showed no signs of sensitization. If EA or RGG was injected 3 months after BSA, they responded with typical primary immunological reactions. If EA or RGG were given following BSA 3 months after the 1st injections, they induced the typical secondary response observed in the earlier group.

Picrylated guinea **pig albumin** was injected into the foot pads of guinea **pigs** with or without previous treatment with BSA, human serum **albumin**, or human γ-globulin. The cutaneous hypersensitivity reactions on subsequent reinjection were the same in both groups. However, when the local injections into foot pads were added to systemic treatment, a definite decrease in the size of the cutaneous reaction developed in the groups which were pretreated with the paralyzing antigens. During the induction of immune paralysis a period of nonspecific unresponsiveness occurred, even when sensitization was performed with Freund's complete adjuvant. When immunologically competent cells become paralyzed by an antigen given in large doses, their capacity to be sensitized towards another antigen is inhibited, at least for a certain period. C57BL adult mice were used as the donors for splenic cells, which were injected into F1hybrid (C57BL + C3H) adult mice. The injection of 108C57BL splenic cells to the F1hybrids always produced 100% mortality in 20 days. Immunologic paralysis with RGG inhibited the mortality of subsequently injected splenic cells, so that by day 47 only 43% of the animals were dead and the remainder survived up to 120 days. The paralyzing doses of RGG depressed the reactivity of the competent cells in the mice, and reduced by 50% the mortality of the recipient animals via graft-vs.-host reaction. In the case of homograft skin transplants in male adult rabbits, RGG paralysis increased the survival of the skin transplant 2-3-fold. Further studies on mice indicated that the nonspecific inhibition of immunological response lasts only during the phase of induction of immune paralysis. Using mice with weak or strong histocompatibility barriers, spleen or bone marrow cells were injected from donors into recipients. The donor mice were treated with RGG for 6-10 days, or Limulus polyphemus hemocyanin. The recipient mice were irradiated with 500 r. 24 hrs. before the cell transfer. Survivors from the graft-vs.-host reaction were grafted with free skin grafts 25-35 days following the cell transfer. Treatment of the donor animals with unrelated antigens regularly inhibited graft-vs.-host reactions after transfer of spleen cells with consequent induction of specific immune tolerance in the recipient animals when a weak histocompatibility barrier is involved. In the strong histocompatibility barrier there is a partial inhibition of the graft-vs.-host reaction and a prolongation of the skin-graft survival time.

L4 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 22 Apr 2001
ACCESSION NUMBER: 1954:52918 HCAPLUS
DOCUMENT NUMBER: 48:52918
ORIGINAL REFERENCE NO.: 48:9393f-i,9394a-i
TITLE: Cholesterol and companions. V. Microdetermination of 7-stenols
AUTHOR(S): Nakanishi, Koji; Bhattacharyya, Bidyut Kamal; Fieser, Louis F.
CORPORATE SOURCE: Harvard Univ.
SOURCE: Journal of the American Chemical Society (1953), 75, 4415-17
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The 7-stenol (LXXII) content of a sterol preparation is determinable with accuracy by a method based upon the oxidation with SeO_2 and spectrophotometric determination of the iodine equivalent to the Se formed.

from typical human tissues contains 0.3-3% LXXII. Prior to the analysis the LXXII content of the sample was estimated by the calorimetric tests and a sample estimated to contain about 50 γ LXXII was weighed into a weighing stick, the stick inverted into the side arm of a special separatory funnel (illustrated), the sample rinsed in with 2 cc. pure C6H6 and 2 cc. 0.1M H2SeO3 (prepared by dissolving 1.29 g. H2SeO3 in 2 cc. H2O and diluting with AcOH to 100 cc.), the mixture let stand 2 hrs. at 5-8°, washed with two 2-cc. portions H2O, two 2-cc. portions 5% aqueous NaHCO3, and again two 2-cc. portions H2O, the residual C6H6 solution poured into a Pyrex Carius tube (300 + 9 mm.), the funnel rinsed with 1 cc. C6H6, the tube heated on the steam bath, a stream of air passed in to evaporate the C6H6 in less than 5 min., the residue treated with 0.5 cc. concentrated HNO3, the tube sealed and heated 5 hrs. at 300°, the resulting aqueous solution washed into a 10-cc. beaker with 1 cc. H2O, excess sulfamic acid added, the solution heated 20 min. on the steam bath, made slightly alkaline with about 0.8 cc. 8.5N aqueous NaOH, treated with 3 drops freshly prepared solution of 3 g. KI in 25 cc. H2O, diluted to 3 cc. with H2O, acidified with 0.5 cc. 36% HCl, let stand 5 min., and the optical d. measured in a Beckmann spectrophotometer at 425 mμ; when the LXXII content was greater than the optimum amount specified, fairly satisfactory detns. of the optical d. could be made by diluting the solution with acidified aqueous KI.

The directly read optical d. was corrected by subtracting a reagent factor and a I factor. In this manner was determined the LXXII content of I samples from various sources (source and % LXXII given): spinal cord and brain of cattle, 0.60; human brain, 1.43; normal human serum, 0.60; gallstones (from individual patients: 2.59, 2.72, 2.76, 2.45, 3.11, 3.19, 2.63, 2.62) average 2.63; egg yolk, 0.39; beef adrenal, 0.65; **hog** liver, 0.35; wool fat, 2.97; cancer tissue, 0.29; nephrotic syndrome blood **plasma**, 2.49; by glandular perfusion, 2.00; rat skin, 18.9; dog skin, 9.1; atherosclerotic **plasma**, 0.24; XLI from Terpioz fugax (Bermuda sponge) contained 10.8, and Spongia sp. (Bahamas bath sponge) contained 34.3% LXXII. Sterols from the following animals were estimated to contain less than 1% LXXII: Arenicola, Limulas, Ascidia prunum, Plexaura sp., Dysidea crashayi, Gorgonia flabellum, Geodia gibberosa, Verongia fulva, Aplysia sp., Ophiura sarsi, Gorgonocephalus sp., Crinoid sp., Geodia zetlandia. A sheet of Ag foil, the surface of which was roughened with fine emery paper and cleaned with EtOH, was cut into 1 + 4 mm. pieces (stored in the dark); 1-cc. portions of C6H6 solns. of unknowns or of standard solns. containing 0.01 to 0.10 mg. XXXVIII were measured into the special separatory funnel, 1 cc. 0.1M H2SeO3 introduced into each funnel, the funnels let stand 2 hrs. at 26° (precipitation of red Se during this period indicated that the test solns. were too concentrated), each C6H6 solution washed with two 1-cc. portions H2O, two 1-cc. portions 5% aqueous NaHCO3, and again twice with 1 cc. H2O each, poured into a small test tube, the funnels rinsed each with 0.5 cc. C6H6, the combined C6H6 solns. treated each with 1 cc. 95% EtOH and 2 drops 36% HCl, a strip of Ag foil added, the individual Ag strip from an unknown washed with EtOH, placed against a light background, and the surface darkening compared with that of a series of strips from standard solns.; if a sample contains more than 0.1 mg. LXXII/cc. the surface darkening is too intense for a satisfactory comparison. A lipid concentrate (15 g.) from liver in 50 cc. absolute EtOH and

30 cc. C6H6 added to a solution from 7 g. Na and 128 cc. absolute EtOH, the mixture heated 30 hrs. at 50-60°, cooled, and diluted with 10 cc. H2O, most of the EtOH distilled off, the residue diluted with H2O, extracted

with Et2O, the extract washed, dried, evaporated, and the dark semi-solid residue crystallized from AcOH and then MeOH, and finally with Norit from 95% EtOH gave 2.6 g. colorless sterol, m. 148-9°, and a 2nd crop of 2 g., m. 144-6°. A sterol fraction concentrate (80 g.) from beef adrenal saponified similarly gave 2.8 g. sterol, m. 148-9.5°. A sterol fraction from hog testes crystallized from MeOH gave a small amount solid, m. 152-5°, which was discarded; the material from the mother liquors recrystd. twice from MeOH gave sterol, m. 145-7°. A carcinoma of the stomach (100 g.) cooled in Dry Ice, powdered in a mortar, and refluxed 1.5 hrs. with 1.5 l. 3:1 EtOH-Et2O, the mixture filtered, the residue refluxed again with 1.5 l. of the same solvent mixture, the combined filtrates evaporated under N, the residual dark gum digested with two 50-cc. portions petr. ether, the combined exts. cooled, and filtered, the filtrate evaporated, the residue (5 g.) refluxed 5 hrs. with 5 g. KOH in 50 cc. MeOH, the mixture diluted with H2O, extracted with Et2O, and the resulting yellow sterol fraction recrystd. twice from MeOH yielded 143 mg. colorless sterol, m. 145.5-47°, and a 2nd crop of 70 mg., m. 144-6°; chromatography of the material from the mother liquor gave addnl. 160 mg. sterol, m. 143-5°. The residual cancer tissue further extracted continuously 6 hrs. with 100 cc. Me2CO and then 8 hrs. with 100 cc. CHCl3, and the exts. combined and concentrated to about 3 cc. deposited a small crop of crystals, m. 225-35° (decomposition), which gave recrystd. from Et2O-petr. ether 2.9 mg. solid, m. 232-8° (decomposition). Fresh dog skins depilated with alkali, scraped, superficially dried, soaked in Me2CO, cut into pieces, 100 g. of this material extracted 48 hrs. with 350 cc. Me2CO and 5 cc. EtOH, the extract treated with a little saturated aqueous MgCl2, filtered, evaporated, and the residue treated 12 hrs. with alc. alkali and chromatographed yielded 80 mg. sterol, m. 141.5-42°. Rats were skinned very conveniently after first blowing compressed air through a needle inserted under the skin of the small part of the leg; sterol was extracted from the skins and crystallized from MeOH; 100 rats yielded thus 300 mg. sterol, m.127-33°; recrystd.,m. 130-6°.

L4 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 22 Apr 2001
ACCESSION NUMBER: 1949:37424 HCAPLUS
DOCUMENT NUMBER: 43:37424
ORIGINAL REFERENCE NO.: 43:6773i,6774i,6775a-d
TITLE: Research in agriculture
AUTHOR(S): Taggart, W. G.; Forbes, I. L.
SOURCE: Louisiana Agr. Expt. Sta. Ann. Rept. (1949), Volume Date 1947-1948 3-153
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Progress repts. are made, of which the following are of chemical interest: surface activity of biotin; turbidity and titration methods of measuring growth of Lactobacillus casei in presence of lipide stimulants; efforts to isolate the lathyritic factor of the singletary pea; phys. and chemical changes in milk fat and egg yolk during freezing storage; comparison of ascorbic acid content of whole blood and **plasma** as criteria of nutritional studies; tryptophan and ash changes in frozen **shrimp**; bacterial count of peeled and unpeeled frozen **shrimp**; dehydrated sweet potatoes as a feed for fattening **swine**; fertilization of rice, sugar cane, and soybean (including minor elements and rates of absorption); effect of dilution rate on bull semen efficiency; effect of sprinkling cows with a fine mist to reduce body temperature and increase milk production; regional

factors affecting composition of milk; blood studies of Red Sindhi-Jersey crossbred cattle; malnutrition of dairy cattle; comparison of Ca arsenate-nicotine and a mixture of benzene hexachloride-DDT-S for boll-weevil control; destructiveness of chlorinated compns. to beneficial insects; disadvantages of benzene hexachloride, toxaphene, parathion, and chlordan on sugar cane; effectiveness of parathion against fall armyworm and lesser cornstalk borer; comparison of chlordan and Ca arsenate for control of sweet potato weevil; benzene hexachloride, chlordan, and pyrethrum-piperonyl cyclonene for control of onion thrips; control of the sand wireworm; nutritional status of Louisiana people of various age groups; high-temperature strain of Phytophthora infestans; internal cork or sweet potatoes; control of sweet potato black rot; organic fungicides for the control of cucumber diseases; effect of fungicides on the color of lily bulbs; pullorum-typhoid complex in chickens; anaplasmosis in cattle; liming of strawberries; insecticides for cabbage caterpillars.

L4 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 22 Apr 2001
ACCESSION NUMBER: 1947:38443 HCAPLUS
DOCUMENT NUMBER: 41:38443
ORIGINAL REFERENCE NO.: 41:7598b-i
TITLE: Research in agriculture, annual report 1945-1946
AUTHOR(S): Taggart, W. G.; Forbes, I. L.
CORPORATE SOURCE: Baton Rouge, LA
SOURCE: Louisiana Agr. Expt. Sta. Ann. Rept. (1947), Volume Date 1945-1946 3-121
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 41, 1791f. The results of the following exptl. studies are briefly reported: **plasma** ascorbic acid, **plasma** protein, and hemoglobin values of high school girls, the diets and **plasma** ascorbic acid levels of pregnant women in South Central Louisiana, utilization by human beings of ascorbic acid from mustard greens, oleic acid as a growth stimulant for Lactobacillus casei, lathyrism produced in rats by ground Singletary peas, toxic principles of the tung nut, freezing storage of okra, unbaked biscuits and cakes, and apple and peach pies, bacteriol. and chemical studies of the cooking and freezing of **shrimp**, use of petroleum ether for determining drip of frozen products, use of ascorbic acid, glutathione, pectin, and CaCl2 in freezing strawberries and strawberry juice, butane and propane flame cultivation, dehydrated sweet potatoes for fattening **swine**, hill land pasture investigations, creep feeding of calves, Singletary pea meal as a protein supplement, rice fertilization, sugar-cane fertilization, various sources of N for cotton, greenhouse studies of major and minor plant elements, N changes in flooded soil planted to rice, rates of sulfofication and effects of grades of agricultural S in soils, pasture improvement with manure, bodily changes in cows during artificial cooling in hot weather, heat tolerance of Jersey and Holstein cows, seasonal comparison of nutritive content of carpet and Dallis grasses, normal blood values of Louisiana dairy cattle, controlling bollworms with DDT, benzene hexachloride for the control of cotton insects, 2,4-D, dinitro-o-sec- butylphenol, ammonium sulfamate, NaF, Ca fluosilicate, and Na pentachlorophenate as eradicants of the field hosts of the sweet-potato weevil, comparison of benzene hexachloride, "3956," Ryanex, and cryolite for sugar-cane-borer control, nicotine as a cucumber-dust ingredient, control of tomato fruitworm with DDT and cryolite, comparison of DDT, benzene hexachloride, and "1068" for the

control of velvetbean caterpillar on soybeans, production of okra seed for oil, cover crop and fertilizer expts. with peaches, carotene and protein content of sweet-potato leaves and vines, controlling alligator weed in sugar cane with 2,4-D, control of spurweed or "burgrass" (Soliva sessilis), oils as weed killers, control of soil rot of sweet potatoes with S, internal cork of sweet potatoes, black rot of sweet potatoes, black scale disease of Easter lilies, shallot and onion-disease studies, root rot of sugar cane and antibiosis, new races of Cercospora oryzae on rice, control of downy mildew of cucumbers and of azalea-flower blight, okra-seed meal in chick rations, improving the quality of market poultry with hormonal substances, single-vegetable-protein laying rations, Johne's disease in cattle, anaplasmosis in cattle, gastrointestinal parasites of cattle and of horses and mules, fertilizing corn and sweet potatoes, Johnson grass as pasture, cotton dusting tests, soil improvement, rice fertilization and mulching, residual effects of Ca arsenate on cotton and rice, use of chlorinated camphene for control of cabbage caterpillar and turnip aphid, and the sugar concns. of 20 Louisiana honey plants.

L4 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 16 Dec 2001
ACCESSION NUMBER: 1943:29491 HCAPLUS
DOCUMENT NUMBER: 37:29491
ORIGINAL REFERENCE NO.: 37:4750f-h
TITLE: Light scattering and molecular weight of proteins
AUTHOR(S): Putzeys, P.; Brosteaux, J.
SOURCE: Meded. Kon. Vlaamsche Akad. Wetensch., Letteren Schoone Kunsten Belgie, Klasse Wetensch. (1941), 3(No. 1), 3-23
From: Chem. Zentr. II, 412(1942).
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 29, 7782.6. Mol. wts. were determined by the light-scattering method previously discussed, with amandin = 330,000 as the standard Values found are ovalbumin 38,000; serum **albumin** of horse 74,000, of ox 77,000, of **swine** 72,000; hemocyanin of Palinurus 462,000, of **Homarus** 710,000, of Sepia 3,200,000, of Helix 6,340,000; excelsin 278,000. Convenient methods of preparing these proteins are given. Extrapolation of the values to infinite dilution appeared to follow the law, $M' = M(1 - b\sqrt{g})$, where M' = apparent mol. weight at a concentration of g g./cc., M = mol. weight, and b is a constant The stability range of several of the proteins at 25° was studied.

L4 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 16 Dec 2001
ACCESSION NUMBER: 1941:40572 HCAPLUS
DOCUMENT NUMBER: 35:40572
ORIGINAL REFERENCE NO.: 35:6323h-i,6324a-b
TITLE: The hemolymph carbohydrates of Cancer **pagurus**. Nature and physiological role
AUTHOR(S): Roche, Jean; Dumazert, Christian
SOURCE: Ann. inst. oceanograph. (1940), 20, 87-95
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The hemolymph of Cancer **pagurus** contains carbohydrates combined with proteins, constituting a protein sugar analogous in

constitution to that of the plasma of vertebrates. In fact, in the hemolymph of C. **pagurus** as well as in the **plasma** of man, horse, ox and **hog** there are two types of combined carbohydrates: (1) those in which the carbohydrate-protein bond is so weak that weak acids such as HOAc destroy it and (2) those in which the carbohydrate-protein bond is so strong that it is broken only by H2SO4 and which contain glucosamine. The metabolism of carbohydrates of C. **pagurus** is regulated by a different mechanism than that existing in higher animals; it does not obey glycoregulatory hormones such as insulin or adrenaline. The fraction of protein sugar capable of being liberated by acetolysis and which is wholly fermentable plays the role of an immediately utilizable reserve for the realization of certain hyperglycemias.

L4 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 16 Dec 2001
ACCESSION NUMBER: 1910:13941 HCAPLUS
DOCUMENT NUMBER: 4:13941
ORIGINAL REFERENCE NO.: 4:2517e-h
TITLE: Solutions of Organic Colloids
AUTHOR(S): Bottazzi, F.
CORPORATE SOURCE: Lab. fisiol. sper., Naples
SOURCE: Archivio di Fisiologia (1909), 7, also in Zentr. Biochem. Biophys., 10, 37
CODEN: ARFIAY; ISSN: 0004-0096
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The following substances were investigated in solns.: serum **albumin**, serum globulin and the blood serum from cattle, dogs and **hogs**, the blood of **Crustacea** and of Cephalopoda, the protein of the lens of the ox, gelatin and glycogen. Carefully prepared, dialyzed serum albumin proved to be electronegative and gave the reactions of a weakly alkaline albumin, although only a trace of alkali was removed in the process of purification; similarly serum globulin was found to be electronegative and to give a very feebly alkaline reaction. The globulin was precipitated more slowly from mammalian blood heated to 55-60° the longer the blood was heated; the proteins from serum heated to 55-60° reacted more strongly alkaline; the elec. conductivity of the warmed serum remained unchanged while the viscosity was greater than in normal serum. The product obtained by dialyzing serum against acidified H2O was quite different from that obtained by similarly dialyzing against alkaline H2O. Gelatin purified by 2 mos. dialysis is carried to the anode; the same remains true after addition of NaCl. Dialyzed albumin in solution showed a greater viscosity and a decreased surface tension after addition of alkali; neutral salts lower the viscosity which is again raised by addition of alkali. This suggests that the function of NaCl in the blood consists in this lowering of the viscosity. Glycogen solns. show the same surface tension as pure H2O, as though it were not a colloid; the viscosity of the solution of glycogen is not increased by addition of NaOH nor is the surface tension decreased.

L4 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 16 Dec 2001
ACCESSION NUMBER: 1909:9414 HCAPLUS
DOCUMENT NUMBER: 3:9414
ORIGINAL REFERENCE NO.: 3:1753e-i,1754a-b
TITLE: Digestive Enzymes of Invertebrates
AUTHOR(S): Roaf, H. E.

CORPORATE SOURCE: Br. Assn., Dublin
SOURCE: Pharmaceutical Journal (1908), 81, 298
CODEN: PHJOAV; ISSN: 0031-6873
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Methods used: Protein digestion, by total N determine after precipitation by trichloracetic acid and by congo-red fibrin; hydrolysis of polysaccharides and saccharose, by coloration with I, and reduction of alkaline Cu solution; hydrolysis of maltose and lactose, by Barfoed's reagent; lipase and rennin by litmus milk; fibrin ferment(?) by oxalated **plasma** from **pig**'s blood. Protein digestion usually attained a maximum at about 40°, the optimum acidity or alkalinity being less than that for mammalian pepsin or trypsin. The enzymes were extracted from the tissues with glycerol, in some cases being then precipitated with alc. and extracted with H2O, the nature of the enzyme being affected by the method pursued. Coagulation of blood plasma was caused by the crystalline style of Pecten but was uncertain with liver extracts of the molluscs Buccinium undulatum, Pecten opercularis, Trochus zizyphinus and Purpurea lapillus. Glycerol extracts of fresh tissues. Protein digestion by N.,Peptic.,Tryptic.,Lipase.,Starch splitting., Glycogen splitting.,Invertase.,Maltase.,Rennin.,Fibrin ferment.;Digestive gland, Cancer **pagurus**,.....,0,+,+,+,+,+,+,+,0;Visceral hump, Patella vulgata,.....,+,0,+,+,+,+,+,+,+;Intestine, Echinus esculeutus,.....,+,0,+,+,+,+,+,+,+;Disc, Ophiocoma nigra,.....,+,+,+,+,0,+,-,+,?;Pyloric caeca, Asterias rubens,.....,+,+,+,+,-,-,-,dig.,?;Stomach, Asterias rubens,.....,0,0,0,0,-,-,-,-,0;Mesenteric filaments, Tealia crassicornis,..,0,+,0,0,0,0,-,+,+;Alcyonium digitatum,.....,+,0,-,-,-,-,-,?,+;Cliona celata,.....,+,0,0,0,-,-,-,?,0;Cellaria fistilosa,.....,+,0,+,+,-,-,-,-,-; Water extracts of Alc. coagula from glycerol extracts. Protein digestion by congo red fibrin.,Peptic.,Tryptic.,Lipase.,Starch splitting.,Glcogen splitting.,Invertase.,Maltase.,Lactase.,Rennin.;Digestive gland, Cancer **pagurus**,.....,0,+,-,+,+,+,+,+,-;Visceral hump, Patella vulgata,.....,?,+,+,+,+,+,+,+,+,+;Liver, Pecten opercularis,.....,0,+,+,+,+,+,+,+,+;Intestine, Echinus esculeutus,.....,0,+,+,+,+,0,+,+,+;Mesenteric filaments, Tealia crassicornis,.,0,+,0,+,0,0,+,0,+;mesenteric filaments, Actinia mesembryanthemum,.....,0,+,0,0,0,0,0,0,+

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L5 40 S L4
L6 35 DUP REM L5 (5 DUPLICATES REMOVED)

L6 ANSWER 1 OF 35 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
ACCESSION NUMBER: 2005-564495 [57] WPIDS
DOC. NO. CPI: C2005-170656
TITLE: Feed additive useful for increasing body weight gain efficacy and feed efficacy in livestock, comprises heat stable, amino terminus-methylated, carboxy-terminus reduced peptide having D-amino acids isolated from Brevibacillus sp.
DERWENT CLASS: B04 C03 D13 D16
INVENTOR(S): JIANG, Y W
PATENT ASSIGNEE(S): (TEXA) UNIV TEXAS A & M SYSTEM
COUNTRY COUNT: 108
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2005074626	A2	20050818	(200557)*	EN	65

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS
IT KE LS LT LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR

TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ
DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA
NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR
TT TZ UA UG US UZ VC VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2005074626	A2	WO 2005-US3343	20050128

PRIORITY APPLN. INFO: US 2004-540569P 20040130
AN 2005-564495 [57] WPIDS
AB WO2005074626 A UPAB: 20050907
NOVELTY - A feed additive (I) comprises isolated and purified, heat stable, amino terminus-methylated, carboxy-terminus reduced peptide having two or more D-amino acids isolated from Brevibacillus sp..

DETAILED DESCRIPTION - A feed additive (I) comprises:

(a) isolated and purified, heat stable, amino terminus-methylated, carboxy-terminus reduced peptide (P1) having two or more D-amino acids isolated from Brevibacillus sp.;or

(b) a peptide (P2) having greater than 75 % sequence homology to one of 20 fully defined 12 amino acid sequences (SEQ ID Number 1-20) given in the specification. (P2) has greater than 75 % sequence homology to amino acid sequences e.g., Me2Bmt-Lys-dOrn-Ile-Val-Val-dLys-Val-dLeu-Lys-dTyr-Leu-Val-CH2OH (SEQ ID Number 1), Me2Bmt-Met-dOrn-Ile-Val-Val-dLys-Val-dLeu-Lys-dTyr-Leu-Val-CH2OH (SEQ ID Number 2), Me2Bmt-Val-dOrn-Ile-Val-Val-dLys-Val-dLeu-Lys-dTyr-Leu-Val-CH2OH (SEQ ID Number 3), and Me2Bmt-Ile-dOrn-Ile-Val-Val-dLys-Val-dLeu-Lys-dTyr-Leu-Val-CH2OH (SEQ ID Number 4).

INDEPENDENT CLAIMS are also included for:

(1) a cereal-based animal feed comprising (P2) and one or more cereals chosen from barley, soya, wheat, triticale, rye and maize;

(2) a peptide-based feed additive comprising 1-1000 ppm of (P2);

(3) an antimicrobial peptide (II) comprising two or more D-amino acids, carboxy-terminus reduced pH and heat stable isolated from Brevibacillus sp.;

(4) an biologically pure culture (III) of microorganisms such as Brevibacillus texasporus having ATCC accession number PTA-5854, producing (II) that is carboxy-terminus reduced heat stable, amino terminus-methylated peptide and comprises two or more D-amino acids;

(5) (I) comprising an isolated and purified microorganisms of (III);

(6) increasing (M1) body weight gain efficiency and feed efficiency in animals, involves mixing the composition of (I) with an animal feed;

(7) a broad spectrum antimicrobial compound (IV) for topical use, comprising (P1);

(8) an isolated and purified nucleic acid chosen from:

(a) nucleic acid (N1) having the sequence of the BT operon (SEQ ID Number 21), or its portion that express proteins which produce (P1);

(b) nucleic acid encoding one or more polypeptide sequences for Bt operon proteins such as BtA, BtB, BtC, BtD, BtE, BtF and BtG having SEQ ID Number 22-28, respectively, where the Bt operon proteins that comprise one or more enzymes used to produce heat stable, amino terminus-methylated, carboxt-terminus reduced peptide comprising two

or more D-amino acids; and

(c) nucleic acid (N2) having at least 75 % homology to SEQ ID Number 21;

(9) an isolated bacterial sample comprising the isolated bacterial strain of Brevibacillus texasporus E58;

(10) an isolated and purified, heat stable amino terminus-methylated, carboxy-terminus reduced (P1) comprising two or more D-amino acids isolated from Brevibacillus sp. that inhibits the growth of a bacterium chosen from Staphylococcus, Enterococcus, Pneumococcus, Bacilli, Methanococcus, Haemophilus, Archaeoglobus, Borrelia, Synedrocyptis, Mycobacteria, Pseudomonas and Escherichia coli;

(11) a bacteria (V) transformed with (N1); and

(12) a vector comprising (N2).

ACTIVITY - Antimicrobial; Protozoacide; Fungicide; Virucide. In vivo analysis of BT1583 peptide in treating the colibacillosis infections was carried out as follows. Pens (10) per treatment (chicken) and 40 birds per pen were taken for the study. The feed (corn-soy based diets) was supplemented with BT1583 (12 ppm) from day 0-21, and day 22-42. On day 22 the house temperature and air flow were modulated, to mimic conditions conductive to outbreaks of colibacillosis within the pens or birds. On day 42, the mortality rate was climbed to a house average of approx. 10 %, and the majority of these deaths occurred in groups not receiving BT1583. The result indicated the protection of the birds against colibacillosis infections, by the BT1583.

MECHANISM OF ACTION - None given.

USE - (I) is useful for treating colibacillosis, which involves providing an animal with (I). (I) is useful for increasing body weight gain efficiency and feed efficiency in animals, where the animals include cattle, swine, chicken, horse, turkey, sheep, goat, farm-raised fish, **crab**, **shrimp** and turtle, and feeding birds are chosen from chicken, turkey, duck, quail, cornish hens and pigeon. (P1) is useful for killing Gram positive bacteria, Gram negative bacteria, fungi, protozoa or their combinations (claimed). (I) is useful for treating microbial infections, protozoal infections, disorders related to such infections, etc.

ADVANTAGE - (I) increases the rate of growth of animals, and is cost effective.

Dwg.0/6

L6 ANSWER 2 OF 35 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2005-081876 [09] WPIDS

DOC. NO. CPI: C2005-028498

TITLE: Use of a single-cell protein material for preparing a pharmaceutical or nutritional cardio-protective composition for treating or preventing e.g. atherosclerosis, coronary heart disease, stenosis or thrombosis in an animal.

DERWENT CLASS: B04 C03 D13 D16

INVENTOR(S): BERGE, R K; KLEPPE, G; BERGE, R

PATENT ASSIGNEE(S): (NORF-N) NORFERM DA; (THIA-N) THIA MEDICA AS

COUNTRY COUNT: 108

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2005002606	A1	20050113	(200509)*	EN	34

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT

KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
NO 2003003082 A 20050105 (200523)
NO 319551 B1 20050829 (200558)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2005002606	A1	WO 2004-NO204	20040702
NO 2003003082	A	NO 2003-3082	20030704
NO 319551	B1	NO 2003-3082	20030704

FILING DETAILS:

PATENT NO	KIND	PATENT NO
NO 319551	B1 Previous Publ.	NO 2003003082

PRIORITY APPLN. INFO: NO 2003-3082 20030704
AN 2005-081876 [09] WPIDS
AB WO2005002606 A UPAB: 20050207
NOVELTY - A single-cell protein material is useful for preparing a pharmaceutical or nutritional cardio protective composition for treating or preventing atherosclerosis, coronary heart disease, stenosis, thrombosis, myocardial infarction, stroke, hypercholesterolemia or fatty liver in an animal.
ACTIVITY - Cardiant; Antiarteriosclerotic; Thrombolytic. No biological data given.
MECHANISM OF ACTION - Gene therapy.
USE - The single-cell protein material is useful for preparing a pharmaceutical or nutritional cardio protective composition for lowering the concentration of homocysteine in the plasma, for changing the fatty acyl pattern or for improving lipid homeostasis. The single-cell protein material is useful for preparing a pharmaceutical or nutritional cardio protective composition for treating or preventing atherosclerosis, coronary heart disease, stenosis, thrombosis, myocardial infarction, stroke, hypercholesterolemia or fatty liver in an animal. (All claimed.)
Dwg.0/4

L6 ANSWER 3 OF 35 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
ACCESSION NUMBER: 2005-180389 [19] WPIDS
CROSS REFERENCE: 2003-340949 [32]; 2004-364202 [34]; 2004-593428 [57]
DOC. NO. NON-CPI: N2005-150405
DOC. NO. CPI: C2005-057766
TITLE: Diagnosing and treating a condition, e.g. anemia, comprises administering a nanoparticle-based assembly having a nanoparticle, surrogate marker, mode for detecting a specific chemical entity, and a payload, to a patient.
DERWENT CLASS: A89 B04 D16 S03
INVENTOR(S): DENNIS, D M; MELKER, R J
PATENT ASSIGNEE(S): (DENN-I) DENNIS D M; (MELK-I) MELKER R J

COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2005037374	A1	20050217	(200519)*		20

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 2005037374	A1	Provisional	US 1999-164250P	19991108
		CIP of	US 2000-708789	20001108
		Provisional	US 2001-292962P	20010523
		CIP of	US 2002-154201	20020522
		CIP of	US 2002-274829	20021021
		CIP of	US 2003-345532	20030116
			US 2003-744789	20031223

PRIORITY APPLN. INFO: US 2003-744789 20031223; US
1999-164250P 19991108; US
2000-708789 20001108; US
2001-292962P 20010523; US
2002-154201 20020522; US
2002-274829 20021021; US
2003-345532 20030116

AN 2005-180389 [19] WPIDS
CR 2003-340949 [32]; 2004-364202 [34]; 2004-593428 [57]
AB US2005037374 A UPAB: 20050321
NOVELTY - Diagnosing and treating (M1) a condition, disease, or disorder comprises:

(a) administering a composition comprising a nanoparticle-based assembly, which has a nanoparticle, surrogate marker, and a mode for detecting a specific chemical entity (SCE), and a payload;

(b) obtaining a sample of biological fluid from the patient; and

(c) applying sensor technology to detect the presence of the surrogate marker.

DETAILED DESCRIPTION - Diagnosing and treating (M1) a condition, disease, or disorder, comprises:

(a) administering to a patient, a composition comprising at least one nanoparticle-based assembly, which has a nanoparticle, surrogate marker, and a mode for detecting a specific chemical entity (SCE), and a payload;

(b) obtaining a sample of biological fluid from patient; and

(c) applying sensor technology to the sample of biological fluid to detect the presence of the surrogate marker.

ACTIVITY - Antiarteriosclerotic; Metabolic; Cytostatic; Hemostatic; Antianemic; Immunomodulator; Antibacterial; Antifungal; Anesthetic; Antiinflammatory; Analgesic; CNS-Gen.; Cardiovascular-Gen.; Nephrotropic; Endocrine-Gen.; Antilipemic; Anti-HIV; Muscular-Gen.; Neuroleptic; Neuroprotective; Vasotropic; Gynecological; Antiinfertility; Contraceptive. No supporting data is given.

MECHANISM OF ACTION - Gene therapy.

USE - (M1) Is useful for diagnosing and treating a condition, disease or disorder (claimed), where the disease or disorder includes atherosclerosis, glycogen storage disease, leukemia, anaplastic lymphoma, Hodgkin's disease, hemophilia, Telfer's disease,

thrombocytopenia, anemia, Chediak-Higashi syndrome (CHS), etc.

ADVANTAGE - (M1) Enables efficient and accurate diagnosis and treatment of a condition, disease or disorder, such as atherosclerosis. (M1) Allows early detection of disease and identifies those at risk of developing the disease, provides an indication of the prognosis of the disease, allows for accurate monitoring of therapeutic efficacy and drug compliance, allows for detection of disease recurrence, and allows for focused treatment of the disease, disorder or condition.

Dwg.0/1

L6 ANSWER 4 OF 35 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2004-677127 [66] WPIDS
CROSS REFERENCE: 2003-756772 [71]; 2003-845073 [78]; 2004-662434 [64]
DOC. NO. NON-CPI: N2004-536702
DOC. NO. CPI: C2004-241316
TITLE: Detecting a chromosomal abnormality, e.g. translocations, transversions, monosomies, trisomies, aneuplodies, deletions, or arrangements, comprises determining the sequence of alleles of a locus of interest in the sample from template DNA.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): DHALLAN, R
PATENT ASSIGNEE(S): (RAVG-N) RAVGEN INC
COUNTRY COUNT: 105
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2004079011	A1	20040916	(200466)*	EN	429

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

AU 2003268333	A1	20040928	(200502)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004079011	A1	WO 2003-US27308	20030829
AU 2003268333	A1	AU 2003-268333	20030829

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2003268333	A1	Based on	WO 2004079011

PRIORITY APPLN. INFO: WO 2003-US6198 20030228
AN 2004-677127 [66] WPIDS
CR 2003-756772 [71]; 2003-845073 [78]; 2004-662434 [64]
AB WO2004079011 A UPAB: 20050107

NOVELTY - Detecting a chromosomal abnormality in a sample comprises determining the sequence of alleles of a locus of interest in a sample from template DNA.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
(1) a method for preparing a sample for analysis;
(2) a composition comprising fetal DNA and maternal DNA, where the percentage of free fetal DNA in the total free DNA of the composition is 15-99.7% fetal DNA; and
(3) a prenatal diagnostic method comprises analyzing a composition of (2).

USE - The method is useful for detecting a chromosomal abnormality in a sample. Specifically, the method is useful for detecting chromosomal abnormalities in a fetus including translocations, transversions, monosomies, trisomies, and other aneuplodies, deletions, additions, amplifications, and arrangements. Dwg.0/20

L6 ANSWER 5 OF 35 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
ACCESSION NUMBER: 2005-019819 [02] WPIDS
CROSS REFERENCE: 2004-516171 [49]
DOC. NO. NON-CPI: N2005-016802
TITLE: Computer-implemented customized feed determination method e.g. for cattle, involves generating formulation data depending on nutritional profile data and feed state of animal.
DERWENT CLASS: P14 T01 X25
INVENTOR(S): CIESLAK, D G; COOK, D A; LIGT, C P A V D; NEWCOMB, M D
PATENT ASSIGNEE(S): (CANT-N) CAN TECHNOLOGIES INC
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2004231605	A1	20041125	(200502)*		10

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2004231605	A1 Cont of	US 2002-328456	20021223
		US 2004-865614	20040610

PRIORITY APPLN. INFO: US 2002-328456 20021223; US 2004-865614 20040610
AN 2005-019819 [02] WPIDS
CR 2004-516171 [49]
AB US2004231605 A UPAB: 20050107
NOVELTY - The nutritional profile data of the animal is calculated from the characteristic data like body heat state of the animal. The formulation data is generated, based on the nutritional profile data and the feed data.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for optimizing the growth of an animal.

USE - For determining customized feed containing wheat middling, corn, soybean meal, corn gluten meal, distillers grains or distillers grain with solubles, **blood meal**, salt, macro-minerals, trace minerals and vitamins for animals such as cattle, **swine**, poultry, equines, fish, **crustaceans**, etc.

ADVANTAGE - Since feed is optimized, cost benefit in reducing

mass of material is achieved. Single ingredient with higher or lower heat increment value allows the producer greater flexibility to satisfy other criteria in addition to heat increment value.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart illustrating the breakdown of gross energy eaten by an animal into net energy usable by the animal.

Dwg.1/4

L6 ANSWER 6 OF 35 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2004-727719 [71] WPIDS
CROSS REFERENCE: 2002-518012 [55]
DOC. NO. CPI: C2004-255567
TITLE: Immunostimulator for disease and cancer prevention for animals and humans comprises **swine** **plasma** that expresses immunostimulative activity, preventing effect on infectious disease, and anti-tumor effect.
DERWENT CLASS: B04 C03 D13
INVENTOR(S): HATTORI, T; TACHIKAWA, Y; TAKAHASHI, Y
PATENT ASSIGNEE(S): (APCA-N) APC CO INC
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2004197342	A1	20041007	(200471)*		10

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 2004197342	A1	Provisional	US 2000-191211P	20000322
		Cont of	US 2001-808840	20010315
			US 2003-699810	20031103

PRIORITY APPLN. INFO: US 2000-191211P 20000322; US 2001-808840 20010315; US 2003-699810 20031103

AN 2004-727719 [71] WPIDS
CR 2002-518012 [55]
AB US2004197342 A UPAB: 20041104

NOVELTY - An immunostimulator (I) comprises **swine** **plasma** that expresses immunostimulative activity, preventing effect on infectious disease, and anti-tumor effect on **crustacea**, fish, other animals and humans.

ACTIVITY - Cytostatic; Immunostimulant; Antimicrobial.

MECHANISM OF ACTION - None given.

USE - As an immunostimulator, for preventing infectious disease, and in cancer prevention for animals and humans.

ADVANTAGE - The immunostimulator shows a superior effect in immunostimulation, prevention of infection, and cancer prevention in very small amounts and is thus economical. It can be efficiently administered and used.

Dwg.0/0

L6 ANSWER 7 OF 35 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2005:89827 BIOSIS

DOCUMENT NUMBER: PREV200500087252
TITLE: Feeding patterns of Triatoma longipennis Usinger (Hemiptera, Reduviidae) in peridomestic habitats of a rural community in Jalisco State, Mexico.
AUTHOR(S): Breniere, Simone Fredrique [Reprint Author]; Pietrokosky, Silvia; Gastelum, Ezequiel Magallon; Bosseno, Marie-France; Soto, Maria Margarita; Ouaissi, Ali; Kasten, Felipe Lozano; Wisnivesky-Colli, Cristina
CORPORATE SOURCE: UR08, Inst Rech Dev, 911 Av Agropolis,BP 64501, F-34394, Montpellier, France
SOURCE: Journal of Medical Entomology, (November 2004) Vol. 41, No. 6, pp. 1015-1020. print.
CODEN: JMENA6. ISSN: 0022-2585.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 2 Mar 2005
Last Updated on STN: 2 Mar 2005

AB We analyzed triatomine blood feeding patterns to evaluate the role of peridomiciles in Trypanosoma cruzi transmission at the rural village of Tepehuaje de Morelos at Jalisco State, Mexico (1999). A total of 206 bugs were collected in 11 out of 26 households (42.3%). Nymphs predominated in the collections (64.9% of the total). Except for one Triatoma barberi female, a species that belongs to the protracta species complex, all adults were Triatoma longipennis, a species of the phyllosoma complex. Triatomines were exclusively present in peridomestic sites mainly piles of tiles and bricks, and none were found indoors. Overall infection rate was 56.6% and no significant differences ($P > 0.05$) were observed between nymphs and adults or mates and females. Identified **blood meals** were chicken (29.4%), opossum (20.9%), **pig** (24.5%), murid (20.9%), dog (3.5%), and armadillo (0.7%). No gut content reacted against anti-human, anti-bovine, anti-rabbit, and anti-cat sera. In contrast to fifth nymphs and adults, 87% of the small nymphs fed on one host, indicating that they are less mobile than other stages. Most fifth nymphs and adults fed on domestic hosts, while small nymphs mainly fed on opossum and murid. infection blood-meal indexes were around 50% for single meals on opossum and murid, stressing their importance as trypanosome donors. Peridomiciles in Tepehuaje could be regarded as interaction sites among domestic and wild and synanthropic mammals and triatomines, which would facilitate circulation of the same T cruzi strains between domestic and sylvatic cycles. Stone-made walls and building materials, which hold synanthropic rodents and opossums, should be considered as targets for vector control measures.

L6 ANSWER 8 OF 35 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2005:35357 CABA
DOCUMENT NUMBER: 20053011065
TITLE: **Shellfish** industrial utilization to produce sausage
Aproveitamento industrial de marisco na producao de linguica
AUTHOR: Bispo, E. da S.; Santana, L. R. R. de; Carvalho, R. D. S.; Andrade, G.; Leite, C. C.; da S. Bispo, E.; de Santana, L. R. R.
CORPORATE SOURCE: Departamento de Analises Bromatologicas, Faculdade de Farmacia - UFBA, Rua Barao de Geremoabo s/n, Campus de Ondina, CEP: 40.170-210, Salvador, BA, Brazil. ebispo@ufba.br; ligiarrs@ig.com.br;

graciele.andrade@globo.com; clicia@ufba.br
SOURCE: Ciencia e Tecnologia de Alimentos, (2004) Vol. 24, No. 4, pp. 664-668. 22 ref.
Publisher: Sociedade Brasileira de Ciencia e Tecnologia de Alimentos. Campinas
ISSN: 0101-2061
PUB. COUNTRY: Brazil
DOCUMENT TYPE: Journal
LANGUAGE: Portuguese
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 20050304
Last Updated on STN: 20050304

AB The processing and acceptability of the vongole (Anomalocardia brasiliana) sausage were studied by evaluating the stability of the frozen products based on their physicochemical, microbiological and organoleptic properties. The vongole sausage had the following formulation: 48% vongole, 5% soya protein, 15% water, 25% **pig** fat, 3% **albumin**, 2% blend of cure salts and NaCl, 1.5% flavouring and 0.5% colouring. The final product was stored for 3 months at -18[deg]C. Based on the sensory evaluation, the vongole sausages reached a good score; its acceptability index was 78-87%, for all evaluated attributes especially for flavour and texture. The product was also evaluated as having an ideal vongole flavour and seasoning flavour for 66.67 and 73.33% of tasters, respectively. The results of the purchase intention test showed that 46.67% of the consumers had probable or certain intentions of buying the products. The data on the microbiological, physicochemical and sensory analyses showed that the vongole sausage was stable during the entire storage period.

L6 ANSWER 9 OF 35 CABA COPYRIGHT 2005 CABI on STN

ACCESSION NUMBER: 2004:127283 CABA
DOCUMENT NUMBER: 20043107596
TITLE: Digestible energy content of traditional and non-traditional feeds for swine determined using the mobile nylon bag technique
AUTHOR: Qiao ShiYan; Thacker, P. A.; Qiao, S. Y.
CORPORATE SOURCE: Ministry of Agriculture Feed Industry Centre, China Agricultural University, No. 2 Yuanmingyuan West Road, Beijing 100094, China.
SOURCE: Journal of Animal and Veterinary Advances, (2004) Vol. 3, No. 6, pp. 371-377. 22 ref.
Publisher: Grace Publications Network. Faisalabad
ISSN: 1680-5593
PUB. COUNTRY: Pakistan
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20040806
Last Updated on STN: 20040806

AB This experiment used the mobile nylon bag technique (MNBT) to determine dry matter and energy digestibility in traditional feeds as well as non-traditional feeds in order to calculate digestible energy (DE) values for use in ration formulation programmes for **swine** . A total of 23 ingredients were tested in this experiment including six animal protein sources (**blood meal**, fish meal, meat meal, spray dried animal **plasma**, spray dried red blood cells and **shrimp** head flour), six oilseeds (extruded full-fat soyabean, raw sunflower seeds, roasted sunflower seeds,

caraway seeds, raw flaxseed, and micronized flaxseed), three oilseed meals (cottonseed meal, soyabean meal, and borage meal), five wheat or wheat byproducts (wheat, wheat distillers grains, wheat mill run, wheat bran, and dried wheat thin stillage) and three miscellaneous feeds (beet pulp, barley malt and milk fat product). Nylon bags containing one gram of feed were placed in a 1000-ml beaker containing 500 ml of a solution made up of deionized water, 0.01 N HCl and one gram of purified activated pepsin powder and incubated for 4 h at 37[deg]C. The bags were then inserted into the duodenum of one of five **pigs** through simple T-cannulae. Eight bags were administered to each **pig** daily. The bags were inserted into the duodenal cannulae during feeding time with four bags being inserted in the morning and four bags being inserted during the afternoon meal. With each feeding, two bags were introduced 15 min apart. Between five and ten nylon bags were prepared for each feed and the experiment was conducted over a 7-day period. Overall, the MNBT produced similar results to previously published DE values for 11 out of the 17 ingredients for which previous measurements have been made. For the six feeds where there was a significant discrepancy between the MNBT and previously published values, variation in chemical content provided a reasonable explanation for the discrepancy. For untreated flaxseed, caraway seed, barley malt and beet pulp, the author believes that previously published values are too high for feedstuffs containing such high neutral detergent fibre contents. In the present experiment, the MNBT generated a DE value of 4253 kcal/kg for untreated flaxseed, 1763 kcal/kg for caraway seed, 1800 kcal/kg for barley malt and 1905 kcal/kg for beet pulp. For raw sunflower seed, genetic selection has increased the ether extract content of the seed and therefore the DE value obtained here (3830 kcal/kg) is thought to more closely reflect the DE content of sunflower seeds currently being grown. Only for meat meal, did the MNBT produce a suspect result (3433 kcal/kg), which cannot be readily explained. For the remaining six feeds, there are no previously published values with which to compare the DE values determined with the MNBT. Based on their chemical analysis and the generated DE values, **shrimp** head flour (3473 kcal/kg), dried wheat stillage (4291 kcal/kg), roasted sunflower seed (3903 kcal/kg), micronized flaxseed (4155 kcal/kg), and milk fat product (8004 kcal/kg) all appear to have some potential for use as ingredients in **swine** rations. In contrast, borage meal (1562 kcal/kg) does not appear to be a useful ingredient. The overall results of this experiment indicate that the MNBT has considerable potential for use in determining the digestible energy content of **swine** feeds. The MNBT has several advantages compared with conventional digestibility methods in that many feeds can be tested in a relatively short duration of time with significantly fewer animals being used, only small amounts of feed are required and the test allows for energy measurements in feedstuffs that would not normally be fed to **pigs** as a single ingredient.

L6 ANSWER 10 OF 35 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 2005:106037 CABA
DOCUMENT NUMBER: 20053092364
TITLE: Use of the mobile nylon bag technique to determine the digestible energy content of traditional and non-traditional feeds for pigs
AUTHOR: Thacker, P. A.; Qiao ShiYan; Qiao, S. Y.
CORPORATE SOURCE: Department of Animal and Poultry Science, University of Saskatchewan Saskatoon, Saskatchewan S7N 5A8, Canada.

thacker@admin.usask.ca
SOURCE: Pig News and Information, (2004) Vol. 25, No. 4, pp. 165N-170N. 22 ref.
Publisher: CAB International. Wallingford
ISSN: 0143-9014
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20050707
Last Updated on STN: 20050707

AB A modified protocol for the mobile nylon bag technique (MNBT) was used to determine the digestible energy (DE) content of 46 ingredients with potential to be used in **pig** diets. The feeds tested included nine cereal grains (barley, maize, oat, normal and high-fat oat groat, normal and low viscosity rye, normal and bread wheat), five legumes (alfalfa, Desi and Kabuli chickpeas, lupins, peas), three types of canary seed, six animal protein sources (**blood meal**, spray dried **porcine plasma**, spray dried blood cells, fish meal, meat meal, **shrimp** head flour), six wheat by-products (distillers' grains, mill run, bran, thin stillage, wheat heavies, wheat screenings), eight oilseeds (extruded soyabean, raw and roasted sunflower, caraway seed, raw and micronized flax, raw and micronized canola seed), four oilseed meals (soyabean meal, borage meal, rapeseed meal, cottonseed meal) as well as five miscellaneous feeds (barley malt, milk fat product, beet pulp, extruded peas and canola seed, extruded spent hen and soyabean meal). Where possible, the DE values generated were compared to industry standards to confirm the potential of the MNBT as a tool to accurately determine DE values for **pigs**. For the 46 feeds tested, 17 feeds had DE values similar to previously published values. For 19 of the feeds, there are no previously published DE values available to allow a comparison with the DE values determined with the MNBT. For 10 feeds, the MNBT produced significantly different DE values than those previously published. However, deviations in chemical analysis (typically alterations in fat and fibre) generally provided a reasonable explanation for the discrepancy. The overall results of this study indicate that the MNBT has great potential for use in determining the DE content of **pig** feeds. Knowledge of the DE content of alternative ingredients can provide feed formulators with insight into the nutritional value of these feeds and promote greater use of these non-traditional ingredients in **pig** diets.

L6 ANSWER 11 OF 35 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 1

ACCESSION NUMBER: 2005:109775 BIOSIS
DOCUMENT NUMBER: PREV200500107827
TITLE: Feeding value of **shrimp** meal for growing pigs.
AUTHOR(S): Fanimo, A. O. [Reprint Author]; Oduguwa, B. O.; Oduguwa, O. O.; Ajasa, O. Y.; Jegede, O.
CORPORATE SOURCE: Inst Anim Nutr Physiol and Metab, Univ Kiel, Olshaussenstr 40, D-24098, Kiel, Germany
fanitunde_amos@yahoo.com
SOURCE: Archivos de Zootecnia, (2004) Vol. 53, No. 201, pp. 77-85. print.
CODEN: AZOTAW. ISSN: 0004-0592.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Mar 2005

Searcher : Shears 571-272-2528

Last Updated on STN: 16 Mar 2005

AB The effect of feeding **shrimp** meal (SM) on nutrient digestibility, haematology, growth performance and meat quality in 16 Large White x Landrace growing pigs was investigated. Two diets were formulated, a control corn-soybean diet with fish meal (FM) and diet 2 with FM in the control diet replaced by SM. Faecal apparent digestibility was determined in four pigs per diet. Feeding of SM decreased (p0.05) dry matter, crude protein, crude fibre and ash faecal apparent digestibility of the diet. Weight gain and feed/gain were reduced (p0.05) in SM diet. Inclusion of SM in the diet had no significant effect on meat quality but reduced the blood total protein and **albumin** of the **pigs**. Across all treatments, the averages for percentages of carcass meat protein, lipid and ash were 72.0, 24.8 and 3.3 percent, respectively. The results indicate that feeding SM at a high level to replace FM will have detrimental effects on pig performance.

L6 ANSWER 12 OF 35 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
DUPLICATE 2

ACCESSION NUMBER: 2002-518012 [55] WPIDS
CROSS REFERENCE: 2004-727719 [71]
DOC. NO. CPI: C2002-146581
TITLE: Use of **swine plasma** comprising **albumin** or peptides, as an immunostimulator, particularly for preventing infectious disease or cancer in humans or animals.
DERWENT CLASS: B04 C03 D13
INVENTOR(S): HATTORI, T; TACHIKAWA, Y; TAKAHASHI, Y
PATENT ASSIGNEE(S): (HATT-I) HATTORI T; (TACH-I) TACHIKAWA Y; (TAKA-I) TAKAHASHI Y
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002048608	A1	20020425	(200255)*		10

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002048608	A1 Provisional	US 2000-191211P	20000322
		US 2001-808840	20010315

PRIORITY APPLN. INFO: US 2000-191211P 20000322; US 2001-808840 20010315

AN 2002-518012 [55] WPIDS
CR 2004-727719 [71]
AB US2002048608 A UPAB: 20041104
NOVELTY - A novel immunostimulator for animals and humans, comprises **swine plasma** which expresses immunostimulative activity, preventing effect on infectious disease, and anti-tumor effect on **Crustacea**, Pisces, other animals, and humans.

ACTIVITY - Immunostimulator; Virucide; Antibacterial; Fungicide; Parasiticide; Tuberculostatic; Antiinflammatory; Cytostatic.

Tests were carried out as follows: 48 piglets farrowed from 5 sows produced within a similar time period at open-air swinery, were separated in 2 groups of 24 piglets each, after feeding on colostrum,

in the allocation manner that there should be no difference in sex and body weight between 2 groups, and each farrow distributed equally. Group 1 was administered **albumin** (AL) isolated from **swine plasma** at daily doses of 200 mg/kg body weight of piglet, for 35 days mixed into milk replacer. Group 2 of the control group were fed the milk replacer without the substance. Also for the **albumin** group, the **albumin** was used after confirming that antibody (immunoglobulin) against E. coli or any substance with antibacterial activities was not included. The incidence rates of diarrhea caused by E. coli was determined for 35 days after the start of administration. The results showed the incidence rates of E. coli infection was 37.5% in the control group, however using the test substance it was as low as 8.3%, and statistically significantly difference was observed (p at most 0.05). Since no substance such as antibody against E. coli or any substance with antibacterial activities is included in milk replacer fed to the test group, the test substance is considered to prevent E. coli infection by activating immune function of piglets. In addition, the peptide purified from **swine albumin** was shown to reduce the incidence of influenza in humans.

MECHANISM OF ACTION - None given.

USE - The **swine plasma** immunostimulators can express immunostimulative activity, prevent infectious disease and provide an antitumor effect (claimed). The immunostimulators can be used in animal feed, veterinary pharmaceuticals, food or beverage products, or pharmaceuticals for human use (claimed). They can prevent diseases of cultured fishes and **shellfishes** and livestock, and contribute greatly to aquaculture industry and livestock industry. Also for humans, they can activate immune functions, and increase the disease resisting power. The products can be used for preventing infections caused by all virus, Mycoplasma, rickettsia, bacteria, fungi, and parasite, e.g. acute viremia of kuruma **prawn** group (white spot syndrome), iridovirus infection of Pisces, tuberculoid and streptococcus infection of yellowtail, vibrionic disease, atrophic rhinitis and pleuropneumonia of **swine**, infectious bronchitis and E. coli infection of fowl, feline leukemia, VRE infection, enterohemorrhagic E. coli infection, tuberculosis, and influenza in humans.

ADVANTAGE - The active substance enhances non-specific and specific bio-defense mechanisms such as phagocytotic activity, complement activity, lysozyme activity, phenol oxidase activity, cytokine production ability, and antibody production ability on granulocyte of **Crustacea**, leukocyte of Pisces, and T lymphocyte, B lymphocyte, NK cells and macrophage of mammals and humans.

Dwg.0/0

L6 ANSWER 13 OF 35 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
ACCESSION NUMBER: 2000-587582 [55] WPIDS
DOC. NO. CPI: C2000-175331
TITLE: Stimulating immune system of aquatic animals comprises administering supplement comprising animal plasma.
DERWENT CLASS: B04 C03
INVENTOR(S): TAKAHASHI, Y
PATENT ASSIGNEE(S): (AMPR-N) AMERICAN PROTEIN CORP
COUNTRY COUNT: 90
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000056166	A1	20000928	(200055)*	EN	20

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000037689 A 20001009 (200103)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000056166	A1	WO 2000-US7611	20000322
AU 2000037689	A	AU 2000-37689	20000322

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000037689	A	Based on	WO 2000056166

PRIORITY APPLN. INFO: US 1999-125700P 19990323

AN 2000-587582 [55] WPIDS

AB WO 200056166 A UPAB: 20001102

NOVELTY - The immune system of aquatic animals is stimulated by administering a supplement comprising animal plasma.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) production of the supplement which comprises separating the plasma from the whole blood of animals, concentrating the plasma and drying the obtained concentrated product and

(2) a plasma feed product comprising aquatic animal feed and animal plasma.

ACTIVITY - Immunostimulant.

USE - Used for preventing disease, particularly white patch or whit spot disease in aquatic animals, particularly **shrimps** and grouper.

4% Appetein (granular animal plasma) was fed as a supplement to the diet of **shrimps** infected with white spot disease virus. Results showed that **shrimps** fed no supplement experienced complete mortality after 10 days whereas 11/15 **shrimps** fed with the supplement survived.

ADVANTAGE - The survivability of animals is increased when challenged with diseases, including those caused by the white spot baculo virus. The method does not rely on the use of diagnostic techniques, including hybridization tests, in situ hybridization tests and PCR amplification tests and does not require the use of antibiotics or other medications. The method is easy and economical and prevents future outbreaks of disease.

Dwg.0/5

L6 ANSWER 14 OF 35 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 3

ACCESSION NUMBER: 1998:275325 BIOSIS

DOCUMENT NUMBER: PREV199800275325

TITLE: Total replacement of fish meal with animal protein

sources in Nile tilapia, Oreochromis niloticus (L.), feeds.
AUTHOR(S): El-Sayed, A.-F [Reprint author]
CORPORATE SOURCE: Oceanography Dep., Fac. Sci., Univ. Alexandria, Alexandria, Egypt
SOURCE: Aquaculture Research, (April, 1998) Vol. 29, No. 4, pp. 275-280. print.
ISSN: 1355-557X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Jun 1998
Last Updated on STN: 24 Jun 1998

AB The effects of total replacement of dietary fish meal (FM) with animal protein sources on the growth, feed efficiency and profit indices of Nile tilapia, Oreochromis niloticus (L.), were investigated. **Shrimp** meal (SM), **blood meal** (BM), meat and bone meal (MBM), BM + MBM mix and poultry by-product meal (**PBM**) replaced FM in six isonitrogenous (30% crude protein), isocaloric (400 kcal GE 100 g-1) diets. The diets were fed to O. niloticus fingerlings (12.5 g) to satiation twice a day for 150 days. The growth of fish fed SM, PBM and MBM was not significantly different from those fed the FM-based diet, while feed conversion and protein efficiency ratios were significantly retarded. Further reduction in fish performance was noticed when BM or BM + MBM replaced FM in the control diet. Cost-benefit analyses of the test diets indicated that these sources were economically superior to FM. The PBM-based diet produced higher carcass lipid than other diets. Fish fed SM, MBM and PBM diets had significantly higher ash contents ($P < 0.05$).

L6 ANSWER 15 OF 35 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 960623510 JICST-EPlus
TITLE: Effects of Ω-Conotoxin GVIA on the Activation of Capsaicin-Sensitive Afferent Sensory Nerves in Guinea Pig Airway Tissues.
AUTHOR: MORIMOTO H; MATSUDA A; OHORI M; FUJII T
CORPORATE SOURCE: Fujisawa Pharmaceutical Co., Ltd., Osaka, JPN
SOURCE: Jpn J Pharmacol, (1996) vol. 71, no. 2, pp. 161-166.
Journal Code: G0813A (Fig. 3, Tbl. 3, Ref. 22)
CODEN: JJPAAZ; ISSN: 0021-5198
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: English
STATUS: New

AB We examined the effects of Ca2+ channel antagonists on various respiratory reactions induced by the activation of capsaicin-sensitive afferent sensory nerves. Intravenous (i.v.) injection of the N-type Ca2+ channel antagonist Ω-conotoxin GVIA (CgTX) (1-20Mg/kg) dose-dependently inhibited capsaicin-induced guinea **pig** bronchoconstriction, whereas i.v. administration of the L-type antagonist nicardipine (100Mg/kg), the P-type antagonist Ω-agatoxin IVA (AgaTX) (20Mg/kg) or the OPQ family-type antagonist Ω-conotoxin MVIIC (CmTX) (20Mg/kg) had no effect. However, CgTX (20Mg/kg) failed to inhibit substance P-induced guinea **pig** bronchoconstriction. CgTX (20Mg/kg) significantly inhibited cigarette smoke-induced guinea **pig** tracheal **plasma** extravasation, but not the substance P-induced reaction. CgTX also reduced electrical field stimulation-induced guinea **pig** bronchial smooth muscle contraction (0.01-10MM) and capsaicin-induced substance P-like

immunoreactivity release from guinea **pig** lung (0.14MM). This evidence suggests that N-type Ca2+ channels modulate tachykinin release from capsaicin-sensitive afferent sensory nerve endings in guinea **pig** airway tissue. (author abst.)

L6 ANSWER 16 OF 35 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 97:101824 CABA
DOCUMENT NUMBER: 19971407172
TITLE: Byproducts from food industries: processing and utilisation for animal feed in Vietnam
AUTHOR: Le Van Lien; Nguyen Thien; Le Viet Ly; Pryor, W. J. [EDITOR]
CORPORATE SOURCE: National Institute of Animal Husbandry, Thuy Phuong, Tu Liem, Hanoi, Vietnam.
SOURCE: Exploring approaches to research in the animal sciences in Vietnam: a workshop held in Hue, Vietnam, 31 July-3 August, 1995, (1996) pp. 149-152. ACIAR Proceedings No. 68. Publisher: Australian Centre for International Agricultural Research (ACIAR). Canberra Meeting Info.: Exploring approaches to research in the animal sciences in Vietnam: a workshop held in Hue, Vietnam, 31 July-3 August, 1995. ISBN: 1-86320-173-4
PUB. COUNTRY: Australia
DOCUMENT TYPE: Conference Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19970916
Last Updated on STN: 19970916

AB The potential of byproducts of the food industry, their processing and utilization in the animal feed industry were examined. Production processes for **blood meal**, bone meal and silage made from **shrimp** heads or animal blood are described. Molasses was used to preserve animal blood or **shrimp** heads by anaerobic fermentation in an ensiling process which could have on-farm applications. Composition of the processed products is given. High protein levels were observed in blood and **shrimp** head meals and high calcium and phosphorus in bone meals. The nutritional value of the products was compared with fish meal by examining growth responses in **pigs**, chickens and ducks. It is suggested that 3-5% of the processed meals can be used in **pig** and poultry diets.

L6 ANSWER 17 OF 35 DISSABS COPYRIGHT (C) 2005 ProQuest Information and Learning Company; All Rights Reserved on STN
ACCESSION NUMBER: 96:39063 DISSABS Order Number: AAI9619022
TITLE: EVALUATION OF RUMINAL ESCAPE POTENTIAL OF **CRAB** MEAL AND OTHER PROTEIN SUPPLEMENTS AND INFLUENCE OF STEAM EXPLOSION ON RUMINAL DEGRADABILITY OF **CRAB** MEAL
AUTHOR: VISWANATHAN, THOTTATHIL V. [PH.D.]; FONTENOT, J. P. [advisor]
CORPORATE SOURCE: VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (0247)
SOURCE: Dissertation Abstracts International, (1995) Vol. 57, No. 2B, p. 783. Order No.: AAI9619022. 219 pages.
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English

ENTRY DATE: Entered STN: 19960708
Last Updated on STN: 19960708

AB Four experiments were conducted, three to study the value of **crab** meal and other protein supplements, and the other to explore the potential of steam explosion technique to improve the nutritive value of **crab** meal. In Experiment 1, 48 Angus x Hereford and Angus x Simmental steers (avg. BW, 223 kg) were used in a 126-d growth study. Diets were formulated to contain 10.5% CP and 63% TDN, DM basis. In each diet, one third of the N was supplied by the protein supplement. Steers were randomly allotted to the following six supplements: (1) soybean meal (SBM); (2) supplement based on industrial byproducts of both plant and animal origin (IPA); (3) experimental supplement based on byproducts of animal origin (ESA); (4) hydrolyzed supplement Number 3 (HESA); (5) commercial supplement (Pro-Lak$\sp\circler)$ based on animal protein (CS) and (6) **crab** meal (CM). There were no significant positive responses in performance and feed efficiency for any of the protein supplemented groups compared to SBM. There was a trend for a positive response in gain to feed for steers fed CS and IPA. Lower weight gain and gain:feed were recorded for the steers fed HESA supplement. Steers fed CM diet had numerically higher growth and gain:feed than those fed SBM.

In Expt. 2, two metabolism trials were conducted, each with 24 wether lambs (avg. BW, 25 kg). In addition to the six diets that were used for the growth trial, two other diets were used, a negative control (NC) with no supplemental N, and a diet supplemented with urea (U). The supplements supplied one third of the total dietary N. There were no differences in DM and OM digestibilities among the lambs fed the different protein supplements. Lower apparent absorption of N was recorded for the lambs fed the HESA and NC diets. There were no differences in ruminal fluid pH among the sheep fed different protein supplements. Sheep fed CM tended to have higher total VFA compared to other supplements. Highest ruminal NH3 N and blood urea N were observed in lambs fed the U diet.

In Expt. 3, the ruminal degradability of DM and CP of **crab** meal and other protein supplements were estimated in situ, in a ruminally cannulated steer. The highest DM degradability was for **SBM**. The ruminal escape of protein was lowest for **SBM** and the highest for the ESA supplement. The IVDMD of feather meal and **blood meal** combinations (ESA and HESA) were lowest.

In Expt. 4, the potential of steam explosion technique to enhance the nutritive value of **crab** meal was explored. **Crab** meal was steam exploded in a batch steam explosion reactor at two levels of severities. Steam explosion decreased N content of **crab** meal by 20%, and did not improve DM degradability nor increase escape of CP. A 60% increase in chitin degradability, from 21.5 to 34.2% was observed for steam exploded CM. Steam explosion improved IVDMD of CM from 65.9% to 75.2%. (Abstract shortened by UMI.)

L6 ANSWER 18 OF 35 MEDLINE on STN
ACCESSION NUMBER: 94201368 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8150951
TITLE: Sensitive quantitation of endotoxin by enzyme-linked immunosorbent assay with monoclonal antibody against Limulus peptide C.
AUTHOR: Zhang G H; Baek L; Nielsen P E; Buchardt O; Koch C
CORPORATE SOURCE: Department of Immunology, State Serum Institute, Copenhagen, Denmark.

SOURCE: Journal of clinical microbiology, (1994 Feb) 32 (2) 416-22.
Journal code: 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199405
ENTRY DATE: Entered STN: 19940523
Last Updated on STN: 19940523
Entered Medline: 19940506

AB Limulus peptide C, a 28-amino-acid fragment of coagulogen formed by the reaction of endotoxin with Limulus amebocyte lysate, was synthesized, and a monoclonal antibody against it was raised. A new microassay for endotoxin was developed, using this antibody in an enzyme-linked immunosorbent assay for generated peptide C-like immunoreactivity. A linear relationship between absorbance and endotoxin concentration was obtained. Control standard endotoxin in water could be detected to a level of 0.001 endotoxin unit per ml. The endotoxin levels in **plasma** samples from normal humans, rabbit, mice, and guinea **pigs** were generally found to be below the detection limit of 0.01 endotoxin unit per ml of **plasma**. The color and turbidity of specimens did not interfere with the assay. The consumption of Limulus amebocyte lysate in the assay was less than 5% of that in the gel-clot and chromogenic assays. With raw lysate, which was much more stable in solution than chloroform-treated lysate, the assay was still highly sensitive to endotoxin but was totally unresponsive to natural glucans. The monoclonal antibody cross-reacted with peptide C-like immunoreactivity generated in Tachypleus amebocyte lysate, which gave equal sensitivity in the endotoxin assay.

L6 ANSWER 19 OF 35 PASCAL COPYRIGHT 2005 INIST-CNRS. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 1994-0032749 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 1994 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Isolation and characterization of a hemagglutinin with affinity for lipopolysaccharides from plasma of the crayfish Pacifastacus leniusculus
AUTHOR: KOPACEK P.; GRUBHOFFER L.; SOEDERHAELL K.
CORPORATE SOURCE: Univ. Uppsala, dep. physiological botany, 752 36 Uppsala, Sweden
SOURCE: Developmental and comparative immunology, (1993), 17(5), 407-418, 35 refs.
ISSN: 0145-305X CODEN: DCIMDQ
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States
LANGUAGE: English
AVAILABILITY: INIST-16827, 354000048381410040

AN 1994-0032749 PASCAL
CP Copyright .COPYRGT. 1994 INIST-CNRS. All rights reserved.
AB A hemagglutinin with a high specific activity against trypsinized rabbit erythrocytes was identified in **plasma** of the freshwater crayfish Pacifastacus leniusculus. The activity of this crayfish hemagglutinin could be inhibited by sialoglycoproteins such as **porcine** stomach mucin, bovine submaxillary mucin, fetuin, and ovalbumin. However, the involvement of sialic acid in its

binding specificity could not be unambiguously proven. Furthermore, the hemagglutinating activity in the crayfish **plasma** could be specifically inhibited by lipopolysaccharide from E. coli K-235, which might indicate a recognition role for this hemagglutinin. This hemagglutinin, which accounts for less then 0.01% of the total **plasma** protein, was purified to near homogeneity using affinity chromatography on a Fetuin-Sepharose 4B column

L6 ANSWER 20 OF 35 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 93:26745 CABA
DOCUMENT NUMBER: 19930514079
TITLE: Food sources of crabhole mosquitoes collected in Guajaibon forest, Havana province, Cuba
AUTHOR: Castex, M.; Fuentes, O.; Garcia Avila, I.; Avila, I. Garcia
CORPORATE SOURCE: Departamento Control de Vectores, Instituto de Medicina Tropical "Pedro Kouri", Ave 15 y calle 200, Siboney, Marianao 13, Ciudad de La Habana, Cuba.
SOURCE: Memorias do Instituto Oswaldo Cruz, (1992) Vol. 87, No. 3, pp. 459-460. 5 ref.
ISSN: 0074-0276
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 19941101
Last Updated on STN: 19941101

AB Data are provided on the host preferences of crabhole mosquitoes which were collected in Guajaibon forest, La Habana province, Cuba, during February 1987-May 1988. Mosquitoes were collected by placing midge nets over the mouths of crabholes and passing smoke into the holes. **Blood-meals** were identified by immunodiffusion, by screening with broadly reacting anti-bird and anti-mammal sera; if precipitation occurred with the anti-mammal serum, extracts were reacted with anti-human, anti-cow, anti-rat/mouse, anti-horse, anti-dog, anti-cat and anti-**pig** sera. Of the 2384 mosquitoes collected, only 27% of them had recently fed. A total of 647 **blood-meals** from 7 species of mosquito (Deinocerites cancer, Culex janitor, Culex (Melanoconion) sp. A, Culex (Melanoconion) sp. B, Culex (Culex) sp. C, Aedes taeniorhynchus, A. scapularis and Aedes sp.) was identified. The dominant species were D. cancer and C. janitor (54.1 and 38.6% of the total catch, respectively), which had fed mainly on avian hosts. No feeding had occurred on cats or **pigs**, and 22.5% of extracts were not identified.

L6 ANSWER 21 OF 35 TOXCENTER COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:619758 TOXCENTER
DOCUMENT NUMBER: RISKLINE-1989040013
TITLE: Dichlorvos
AUTHOR(S): WHO working group
SOURCE: Environmental Health Criteria, (1989) 79 157 p.
FILE SEGMENT: RISKLINE
LANGUAGE: English
ENTRY DATE: Entered STN: 20030506
Last Updated on STN: 20050803

AB Environmental Transport, Distribution, and Transformation: Dichlorvos is nor directly applied to soil, but is added to water to control invertebrate fish parasites encountered during intensive fish farming. It breaks down rapidly in humid air, water, and soil, both by abiotic

and biotic processes, whereas on wooden surface it may persist for a longer time (39% remaining after 33 days). It degrades mainly to dichloro-ethanol, dichloroacetaldehyde (DCA), dichloroacetic acid, dimethylphosphate, dimethylphosphoric acid, and other water-soluble compounds, which are eventually mineralized. Dichlorvos is rapidly lost from leaf surfaces by volatization and hydrolysis. Accidental spillage of dichlorvos may have acute hazardous effects on man and the environment. However, long-term effects are unlikely, in view of the volatility and instability in humid environments. Bioaccumulation or biomagnification do not occur, (log Pow = 1,47). Effects on Organisms in the Environment: The effect of dichlorvos on microorganisms is variable and species dependent. Certain microorganisms have the ability to metabolize dichlorvos but the pesticide may interfere with the endogenous oxidative metabolism of the organism. In certain organisms it causes growth inhibition, while in others it has no influence or may even stimulate growth. Dichlorvos has little or no toxic effect on microorganisms degrading organic matter in sewage. The above effects have been seen over the wide dose range of 0.1 - 100 mg/litre. The IC50 value in a growth inhibition test with the unicellular alga Eugelena gracilis was 3,5 mg/l. The acute toxicity of dichlorvos for both freshwater and estuarine species of fish is moderate to high (96-h LC50 values range from 0.2 to approximately 10 mg/litre). Brain and liver ChE inhibition in certain fish was found at dose levels of 0.25 - 1.25 mg/litre, but recovery of ChE activity took place when they were returned to clean water. Invertebrates are more sensitive to dichlorvos. The acute toxicity of dichlorvos for aquatic insects and **crustaceans** is extremely high. Levels above 0.05 ug/litre may have deleterious effects, (Daphnia pulex, 48-h LC50 = 0,07 ug/l). Dichlorvos also has a high oral toxicity for birds. The LD50 values are in the range of 5 - 40 mg/kg body weight In short-term dietary studies, the compound was slightly to moderately toxic for birds (8-day dietary studies showed LC50 values of 300-5000 mg/kg diet). Brain ChE inhibition was seen at 50 mg/kg diet or more and at 500 mg/kg diet, half of the birds died. There have been instances when chickens and ducks have died after accidental access to dichlorvos-contaminated feed and drinking-water. Dichlorvos is highly toxic for honey bees. The LD50 by oral administration is 0.29 ug/g bee, and after topical application is 0.65 ug/g bee. Effects on Experimental Animals and In Vitro Test Systems: Dichlorvos is moderately to highly toxic when administered in single doses to a variety of animal species by several routes. It directly inhibits acetylcholinesterase (AChE) activity in the nervous system and in other tissues. Maximum inhibition generally occurs within 1 h, and is followed by rapid recovery. The oral LD50 for the rat is 30 - 110 mg/kg body weight, depending on the solvent used. The hazard classification of dichlorvos by WHO (1986a) is based on an oral LD50 for the rat of 56 mg/kg body weight. The signs of intoxication are typical of organophosphorus poisoning, i.e., salivation, lachrymation, diarrhoea, tremors, and terminal convulsions, with death occurring from respiratory failure. The signs of intoxication are usually apparent shortly after dosing, and, at lethal doses, death occurs within I h. Survivors recover completely within 24 h. Potentiation is slight when dichlorvos is given orally in combination with other organophosphates, but in combination with malathion it is marked. In short-term toxicity studies on the mouse, rat, dog, **pig**, and monkey, inhibition of **plasma**, red blood cell, and brain ChE are the most important signs of toxicity. After oral administration, approximately 0.5 mg/kg body weight (range, 0.3 - 0.7 mg/kg) did not produce ChE inhibition. In a 2-year study on dogs, ChE inhibition was

noted at 3.2 mg/kg body weight or more. Flea collar dermatitis has been described in dogs and cats wearing dichlorvos-impregnated PVC flea collars. This was a primary irritant contact dermatitis which may have been caused by dichlorvos. Many short-term inhalation studies on different animal species have been carried out. Air concentrations in the range of 0.2 - 1 mg/m3 do not affect ChE activity significantly. Other effects, such as growth inhibition and increase in liver weight have been reported at dose levels at least 10 - 20 times higher. It is possible to produce clinical neuropathy in hens, but the doses of dichlorvos required are far in excess of the LD50. The effects are associated with high inhibition of neurotoxic esterase (NTE) in the brain and spinal cord. In the rat, however, neuropathic changes in the white matter of the brain have been reported following repeated daily oral application of an LD50 dose. Immune suppression has been reported in rabbits. At present, no evaluation as to the relevance for human beings can be given; more attention to this aspect is needed. In a long-term study, rats fed dichlorvos in the diet for 2 years showed no signs of intoxication. Hepatocellular fatty vacuolization of the liver and ChE inhibition were significant at the two highest dose levels (2.5 and 12.5 mg/kg body weight). In a carefully conducted long-term inhalation study on rats with whole body exposure (23 h/day, for 2 years), results were comparable with those seen in the oral study. No effects were seen at 0.05 mg/m3; inhibition of ChE activity took place at 0.48 mg/m3 or more. In several reproduction studies on rats and domestic animals, no effects were seen on reproduction, and there was no embryotoxicity at dose levels that did not cause maternal toxicity. At toxic doses, dichlorvos may cause reversible disturbances of spermatogenesis in mice and rats. It was not teratogenic in several studies carried out on rats and rabbits. Dichlorvos is an alkylating agent and binds in vitro to bacterial and mammalian nucleic acids. It is mutagenic in a number of microbial systems, but there is no evidence of mutagenicity in intact mammals, where it is rapidly degraded by esterases in blood and other tissues. Dichlorvos carcinogenicity has been investigated in mice (oral studies) and rats (oral and inhalation studies). The dose levels used in 2-year oral studies were up to 800 mg/litre drinking-water or 600 mg/kg diet for mice, and up to 280 mg/litre drinking-water or 234 mg/kg diet for rats. In a rat inhalation study, dichlorvos concentrations in air of up to 4.7 mg/m3 were tested for 2 years. No statistically significant increase in tumour incidence was found. In two recent carcinogenicity studies on mice and rats, dichlorvos was administered by intubation at dose levels between 10 and 40 mg/kg body weight (mice) and 4 and 8 mg/kg body weight (rat) for up to 2 years. Only preliminary information has been provided The evidence for carcinogenicity in these new studies is difficult to interpret at this time. Only when complete and final reports become available will it be possible to draw more definitive conclusions (in this context, see footnote p. 95, section 8.7.3). From acute and short-term studies, it is clear that the metabolites of dichlorvos are all less toxic than the parent compound. Only DCA was positive in a few mutagenicity tests. Effects on Man: A fatal case of dichlorvos poisoning has been described in the general population: despite correct treatment, a suicide succeeded with approximately 400 mg dichlorvos/kg body weight. In another poisoning case, a woman ingested about 100 mg dichlorvos/kg and survived, following intensive care for 14 days. Two workers who had skin exposure to a concentrated dichlorvos formulation, and failed to wash it off, died of poisoning. There have been two clinical reports describing four patients suffering from severe poisoning from dichlorvos, taken orally, who

survived after treatment and who showed delayed neurotoxic effects. Thus although the possibility of neuropathy in man cannot be excluded, it is likely to occur only after almost lethal oral doses. Since the 1960s, field studies in malaria control have been carried out and the interiors of aircraft have been sprayed with dichlorvos. Exposure to concentrations in the air of up to 0.5 mg/m3 were without clinical effects, and no, or only insignificant, inhibition of blood ChE activity was noted. When dichlorvos was administered orally to human volunteers (single or repeated doses of a slow-release PVC formulation), significant inhibition of red blood cell ChE activity was found at 4 mg/kg body weight or more. At 1 mg/kg body weight or more, plasma ChE activity was significantly inhibited. Daily oral doses of 2 mg dichlorvos/person for 28 days reduced plasma ChE activity by 30%, but red cell ChE activity was unaffected. Human volunteers who were exposed to dichlorvos by inhalation for a certain period per day for a number of consecutive days or weeks showed ChE inhibition at a concentration of 1 mg/m3 or more, but not at 0.5 mg/m3. These results were confirmed in studies with pesticide operators who came into contact with dichlorvos. Hospitalized patients showed similar results after oral administration or exposure by inhalation. Sick adults and children and healthy pregnant women and babies in hospital wards treated with dichlorvos strips (1 strip/30 or 40 m3) displayed normal ChE activity. Only subjects exposed 24 h/day to concentrations above 0.1 mg/m3 or patients with liver insufficiency showed a moderate decrease in plasma ChE activity. No significant effects on plasma or red blood cell ChE activity were observed in people exposed to the recommended rate of one dichlorvos strip per 30 m3 in their homes over a period of 6 months, even when the strips were replaced at shorter intervals than that normally recommended. The maximum average concentration in the air was approximately 0.1 mg/m3. In factory workers exposed to an average of 0.7 mg/m3 for 8 months, significant inhibition of plasma and red blood cell ChE activity was found. Cases of dermatitis and skin sensitization due to dichlorvos have been described in workers handling and spraying different types of pesticides. In addition cross-sensitization with certain pesticides has been seen.

L6 ANSWER 22 OF 35 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER:	86238188 EMBASE
DOCUMENT NUMBER:	1986238188
TITLE:	Conservation of the low density lipoprotein receptor-binding domain of apoprotein B. Demonstration by a new monoclonal antibody, MB47.
AUTHOR:	Young S.G.; Witztum J.L.; Casal D.C.; et al.
CORPORATE SOURCE:	Department of Medicine, M-013D, University of California, San Diego, La Jolla, CA 92093, United States
SOURCE:	Arteriosclerosis, (1986) Vol. 6, No. 2, pp. 178-188. CODEN: ARTRDW
COUNTRY:	United States
DOCUMENT TYPE:	Journal
FILE SEGMENT:	029 Clinical Biochemistry 018 Cardiovascular Diseases and Cardiovascular Surgery
LANGUAGE:	English
ENTRY DATE:	Entered STN: 911210 Last Updated on STN: 911210

AB The fact that low density lipoprotein (LDL) from multiple animal

species binds to the human LDL receptor suggested that the LDL-receptor binding domain of apoprotein (apo) B must be evolutionarily conserved. To determine if a common receptor domain epitope existed on apo B, we generated a monoclonal antibody that was specific for the LDL-receptor domain of apo B. This was accomplished by using a screening procedure that selected for a hybridoma supernatant that could block specific cellular uptake and degradation of LDL. Western blots showed that this antibody, termed MB47, was specific for apo B-100. Fluid phase assays indicated a high binding affinity (Ka = 4 x 109 M-1) and demonstrated that all human LDL particles expressed the MB47 etitope. Scatchard analysis indicated that a maximum of one MB47 molecule bound to each LDL particle. In solid phase assays, antibody MB47 bound to **plasma** or LDL of multiple mammalian species, including guinea **pig**, rabbit, **pig**, dog, cat, seal, whale, bear, and lion, but it did not bind to mouse or rat LDL. In contrast, a rabbit antiserum to LDL and two other anti-apo B monoclonal antibodies, MB3 and MB19, which do not bind to the receptor domain, were specific only for human LDL. LDL from multiple species, including mouse LDL, competed effectively with 125I-human LDL for binding to human fibroblasts. MB47 effectively inhibited uptake and degradation of labeled human, guinea pig, and rabbit LDL by both human and guinea pig fibroblasts. We conclude that antibody MB47 binds to a single receptor domain on LDL and identifies a vital region conserved through mammalian evolution.

L6 ANSWER 23 OF 35 VETU COPYRIGHT 2005 THE THOMSON CORP on STN
ACCESSION NUMBER: 1984-60023 VETU A V
TITLE: Comparison of Methods for Determination of Ascorbic Acid in Animal Tissues.
AUTHOR: Carr R S; Bally M B; Thomas P; Neff J M
LOCATION: College Station, Tex., USA
SOURCE: Anal.Chem. (55, No. 8, 1229-32, 1983) 3 Tab. 6 Ref. CODEN: ANCHAM
AVAIL. OF DOC.: Battelle New England Marine Research Laboratory, Washington Street, Duxbury, MA 02332, U.S.A.
LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT; MPC
AN 1984-60023 VETU A V
AB HPLC with electrochemical detection was compared with 2 colorimetric procedures for the determination of ascorbic acid (AA) in human **plasma** and various tissues from polychaete (Neanthes virens), **shrimp** (**Penaeus** aztecus, Palaemonetes pugio), needlefish, mullet (Mugil cephalus), rat and guinea-**pig**. HPLC was considered to give the most reliable results.
ABEX The previously reported HPLC method use a Partisil 10 SAX column, 60 mM NaOAc pH 4.6 as mobile phase and an amperometric detector with a thin-layer carbon paste electrode operated at 750 mV vs. Ag/AgGl. The colorimetric methods were based on 2,6-dichlorophenol indophenol oxidation of AA to dehydro-AA, reaction with 2,4-dinitrophenyl hydrazine (DNPH) and measurement of the absorbance at 524 nm and reduction of Fe(II) to Fe(II) by AA, complexation of Fe(II) with alpha,alpha+- bipyridyl and measurement of the absorbance at 525 nm. Samples analyzed were the posterior segments of N. virens, abdominal muscle, hepatopancreas and eyestalks of P. aztecus, cephalothoracic region,. abdominal region and whole body of P. pugio, liver, kidney, gill and brain of needlefish and mullet, muscle of needlefish, liver, kidney, lung and brain of rat and guinea-**pig**, muscle and testis of rat, spleen, ovary, internal and red blood cells of guinea-

pig and human **plasma**. The results varied cnsiderably according to the method. The DNPH values were generally within 30% of the HPLC, which would be expected to give the most reliable values because of its specifcity. The bipyridyl method overestimated AA, in some cases by up to 800%.

L6 ANSWER 24 OF 35 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 81:2057 CABA
DOCUMENT NUMBER: 19800155470
TITLE: Fertilization and early development
AUTHOR: Chacon, R. S.; Chakraborty, J.; Choong, S.; Dunbar, B. S.; Evenson, D. P.; Hedrick, J. L.; Heffner, L. J.; Kaye, P. L.; Kiessling, A. A.; Kooda-Cisco, M. J.; Lopo, A. C.; Luckett, D. C.; Mrsny, R. J.; O'Rand, M. G.; Rodman, T. C.; Shapiro, M.; Talbot, P.; Werb, Z.; Shuster, T.; Rosenberg, M. D.; Sammons, D. W.; Fry, G. N.; Storey, B. T.; Wales, R. G.; Church, R. B.; Calarco, P. G.; Vacquier, V. D.; Mukherjee, A. B.; Meizel, S.; Porter, J. P.; Pruslin, F. H.; Allfrey, V. G.; Erickson, R. P.; Glass, R.; Aggeler, J.
CORPORATE SOURCE: USA, American Society for Cell Biology
SOURCE: Journal of Cell Biology, (1980) No. 2, 2, pp. 130a-144a.
Price: Conference paper; Journal article
Meeting Info.: USA, American Society for Cell Biology: Abstracts of papers presented at the twentieth annual meeting, the American Society for Cell Biology, Cincinnati, Ohio, 14-18 November 1980.
ISSN: 0021-9525
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 19941101
Last Updated on STN: 19941101

AB Chacon, R. S.; Talbot, P. Early stages in mammalian sperm-oocyte **plasma** membrane fusion : 131a. Chakraborty, J. Abnormal development of mouse embryo following delayed mating : 140a. Choong, S.; Shuster, T.; Rosenberg, M. D. Effects of protein kinase on calcium uptake in sperm [fowl] : 139a. Dunbar, B. S.; Sammons, D. W. Comparison of the macromolecular structure of the zona pellucida of **porcine** and rabbit oocytes : 143a. Evenson, D. P.; Dunbar, B. S. Flow cytometric analysis of mammalian sperm chromatin heterogeneity : 134a. Hedrick, J. L.; Fry, G. N. Immunocytochemical studies on the **porcine** zona pellucida : 136a. Heffner, L. J.; Storey, B. T. Effects of preincubation at 4 deg C on mouse sperm binding to zonae pellucidae : 142a. Kaye, P. L.; Wales, R. G.; Church, R. B. Histone synthesis in mouse eggs and preimplantation embryos : 133a. Kiessling, A. A. DNA polymerase gamma activity in mouse sperm, embryos and spleen : 135a. Kooda-Cisco, M. J.; Talbot, P. A structural analysis of the spermatophore from the **lobster, Homarus** americanus : 131a. Lopo, A. C.; Calarco, P. G. Stage-specific changes in protein phosphorylation during mouse preimplantation development : 132a. Lopo, A. C.; Vacquier, V. D. Evidence for sperm-specific surface antigenicity common to seven animal phyla : 131a. Luckett, D. C.; Mukherjee, A. B. Comparative studies of chromosomal aberrations in embryos and fetuses of superovulated and spontaneously ovulated mice : 131a. Mrsny, R. J.; Meizel, S. K+ influx is required for the hamster

sperm acrosome reaction : 130a. O'Rand, M. G.; Porter, J. P. Evidence for an ejaculate form of the rabbit sperm autoantigen RSA-1 and inhibition of fertility by anti-RSA-1 antiserum : 132a. Rodman, T. C.; Pruslin, F. H. Sequential displacement of unique chromosomal proteins of sperm and ovum following fertilization [mouse] : 144a. Rodman, T. C.; Pruslin, F. H.; Allfrey, V. G. Displacement of spermatozoal nuclear proteins in vitro [mouse] : 143a. Shapiro, M.; Erickson, R. P. Evidence that the serological determinant of H-Y antigen is carbohydrate : 135a. Talbot, P. Collagenase solutions induce **lobster** ovulation in vitro : 130a. Werb, Z.; Glass, R.; Aggeler, J. Interaction of mouse trophoblast with extracellular matrices - a model for embryo implantation : 138a.

L6 ANSWER 25 OF 35 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 82:2244 CABA
DOCUMENT NUMBER: 19810162733
TITLE: Abstracts of papers presented at the twentieth annual meeting, Cincinnati, Ohio, 14-18 November 1980
AUTHOR: Chacon, R. S.; Talbot, P.; Chakraborty, J.; Choong, S.; Shuster, T.; Rosenberg, M. D.; Cole, A.; Chen, R.; Todd, M.; Langley, R.; Eastman, E. M.; Wray, V. P.; Wray, W.; Heffner, L. J.; Storey, B. T.; Kaiserman, M. Z.; Burkholder, G. D.; Kooda-Cisco, M. J.; Langmore, J. P.; Schutt, C.; Luckett, D. C.; Mukherjee, A. B.; Mrsny, R. J.; Meizel, S.; Myles, D. G.; Primakoff, P.; Yu, L.; Szabo, P.; Hardy, W. D., Jr.; Prensky, W.
CORPORATE SOURCE: USA, American Society for Cell Biology
SOURCE: Journal of Cell Biology, (1980) Vol. 87, No. 2, 2, pp. 1a-345a.
ISSN: 0021-9525
DOCUMENT TYPE: Conference
LANGUAGE: English
ENTRY DATE: Entered STN: 19941101
Last Updated on STN: 19941101

AB Chacon, R.S.; Talbot, P. Early stages in mammalian sperm-oocyte **plasma** membrane fusion : 131a. Chakraborty, J. Abnormal development of mouse embryo following delayed mating : 140a. Choong, S.; Shuster, T.; Rosenberg, M.D. Effects of protein kinase on calcium uptake in sperm [fowl] : 138a. Cole, A.; Chen, R.; Todd, M.; Langley, R. Chromosome organization : 44a. Eastman, E.M.; Wray, V.P.; Wray, W. Fractionation of Chinese hamster metaphase chromosomes : 48a. Heffner, L.J.; Storey, B.T. Effects of preincubation at 4 deg C on mouse sperm binding to zonae pellucidae : 142a. Kaiserman, M.Z.; Burkholder, G.D. Core-like structures in mammalian metaphase chromosomes stained with silver : 43a. Kooda-Cisco, M.J.; Talbot, P. A structural analysis of the spermatophore from the **lobster, Homarus** americanus : 131a. Langmore, J.P.; Schutt, C. High order structure of chicken erythrocyte chromosomes in vivo : 44a. Luckett, D.C.; Mukherjee, A.B. Comparative studies of chromosomal aberrations in embryos and fetuses of superovulated and spontaneously ovulated mice : 131a. Mrsny, R.J.; Meizel, S. K+ influx is required for the hamster sperm acrosome reaction : 130a. Myles, D.G.; Primakoff, P.; Bellve, A.R. Establishment and maintenance of cell surface domains of the guinea **pig** sperm : 99a. Primakoff, P.; Myles, D.G.; Bellve, A.R. Topographical organization of the mammalian sperm cell surface : 98a. Talbot, P. Collagenase solutions induce **lobster** ovulation in vitro : 130a. Yu, L.; Szabo, P.; Hardy, W.D., Jr.;

Prensky, W. The location, the number, and the activity of ribosomal genes in the domestic cat : 49a.

L6 ANSWER 26 OF 35 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1979:48584 BIOSIS
DOCUMENT NUMBER: PREV197916048584; BR16:48584
TITLE: A NEW APPROACH TO THE STRUCTURAL DETERMINATION OF GLYCO PROTEINS AND POLY SACCHARIDES ANHYDROUS HYDROGEN FLUORIDE SOLVOLYSIS.
AUTHOR(S): MORT A J
SOURCE: (1978) pp. 553-561. MARCHESI, VINCENT T. ET AL. (ED.). PROGRESS IN CLINICAL AND BIOLOGICAL RESEARCH, VOL. 23. CELL SURFACE CARBOHYDRATES AND BIOLOGICAL RECOGNITION. PROCEEDINGS OF THE ICN-UCLA SYMPOSIUM. KEYSTONE, COLO., USA, FEB. 1977. XIII+674P. ILLUS. ALAN R. LISS, INC.: NEW YORK, N.Y., USA. ISBN 0-8451-0023-8.
DOCUMENT TYPE: Book
FILE SEGMENT: BR
LANGUAGE: Unavailable

L6 ANSWER 27 OF 35 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1978:231987 BIOSIS
DOCUMENT NUMBER: PREV197866044484; BA66:44484
TITLE: FURTHER STUDIES ON POLYMORPHISM OF THYROXINE BINDING PREALBUMIN IN PRIMATE SPECIES.
AUTHOR(S): TANABE Y [Reprint author]; TANASE H; OMI T; SHOTAKE T; NOZAWA K
CORPORATE SOURCE: DEP POULT AND ANIM SCI, GIFU UNIV, KAKAMIGAHARA, GIFU 504, JPN
SOURCE: Japanese Journal of Genetics, (1977) Vol. 52, No. 4, pp. 319-322.
CODEN: IDZAAW. ISSN: 0021-504X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB Polymorphism of thyroxine-binding prealbumin (TBPA) in the rhesus monkey is controlled by 2 co-dominant alleles, PAF and PASF. According to Tanake et al (1974) tetrameric, TBPA occurred only in the Catarrhini but not in the Platyrrhini spp. was widely present in cercopithecoid spp. but was monomorphic and fixed homozygous F (PAF/PAF) in hominoids. **Plasma** samples collected from hamadryas baboon (Papio hamadryas), doguera baboon (Papio anubis), natural hybrids between P. hamadryas and P. anubis and savannah (grivet) monkey (Cercopithecus aethiops), (all from Ethiopia), human (Homo sapiens), chimpanzee (Pan trogrodytes), Japanese monkey (Macaca fuscata fuscata), Moore monkey (M. maura), red-faced monkey (M. speciosa), **pig**-tailed monkey (M. nemestrina), Formosan monkey (M. cyclopis) rhesus monkey (M. mulatta), bonnet monkey M. radiata, **crab**-eating monkey (M. irus), Assam monkey M. assamensis and mona monkey C. mona were collected and used for TBPA analysis. No individual having PAs was observed in the hominoids examined. In the hominoids including 2 families of Homininae and Hylobatidae, phenotypes of TBPA seemed fixed to homozygous F (PAF/PAF).

L6 ANSWER 28 OF 35 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1979:77122 BIOSIS
DOCUMENT NUMBER: PREV197917017122; BR17:17122
TITLE: PROTOTYPES FOR CLOTTING BY TRANS AMIDATION.
AUTHOR(S): MYHRMAN R V; LORAND L
SOURCE: Thrombosis and Haemostasis, (1977) Vol. 38, No. 1, pp. 181.
CODEN: THHADQ. ISSN: 0340-6245.
DOCUMENT TYPE: Article
FILE SEGMENT: BR
LANGUAGE: Unavailable

L6 ANSWER 29 OF 35 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1977:126777 BIOSIS
DOCUMENT NUMBER: PREV197763021641; BA63:21641
TITLE: GAMMA CARBOXY GLUTAMIC-ACID DISTRIBUTION.
AUTHOR(S): ZYTKOVICZ T H; NELSESTUEN G L
SOURCE: Biochimica et Biophysica Acta, (1976) Vol. 444, No. 2, pp. 344-348.
CODEN: BBACAQ. ISSN: 0006-3002.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
AB The distribution of the vitamin K-dependent amino acid, γ-carboxyglutamic acid was examined in proteins from a variety of sources. Proteins examined include purified rat and bovine coagulation proteins, Ba citrate-adsorbing proteins from trout plasma, lamprey plasma, earthworm hemolymph, army worm hemolymph, **lobster** hemolymph, Escherichia coli B/5, soybean leaf, the protein lysate from the hemolymph cell of the horseshoe **crab** and parathyroid extract. Other purified proteins examined included human α-1-antitrypsin, pepsinogen, S-100, fetuin, tropomyosin-troponin and complement protein C-3. Of these, only the blood-clotting proteins and the vertebrate plasma samples contained γ-carboxyglutamic acid.

L6 ANSWER 30 OF 35 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN DUPLICATE 4
ACCESSION NUMBER: 74045554 EMBASE
DOCUMENT NUMBER: 1974045554
TITLE: Pharmacologic studies of camptothecin (NSC-100880): distribution, plasma protein binding, and biliary excretion.
AUTHOR: Guarino A.M.; Anderson J.B.; Starkweather D.K.; Chignell C.F.
CORPORATE SOURCE: Lab. Toxicol., Div. Cancer Treatm., Nat. Cancer Inst., NIH, Bethesda, Md. 20014, United States
SOURCE: CANCER CHEMOTHER.REP., (1973) Vol. 57, No. 2, pp. 125-140.
CODEN: CNCRA6
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
016 Cancer
030 Pharmacology
LANGUAGE: English
AB Distribution studies of camptothecin given to mice showed that after intraperitoneal administration, the drug rapidly cleared the plasma, kidney, and liver (half life = 30 min), whereas the gastrointestinal tissue levels of camptothecin were cleared very slowly (half life =

210 min). The determination of plasma protein binding of this drug by dialysis, in vitro displacement studies, binding to purified plasma protein fractions, and fluorescence polarization measurements showed that the agent was extensively bound and that it had a very high association constant of about 7.9 x 10-6. Binding of camptothecin to **plasma** in 24 different species showed that more than 90% of the drug was bound in man, monkey, hamster, guinea **pig**, rat, and rabbit; 80%-90% was bound in seal and **lobster**; 60%-80% was bound in **swine**, dog, mouse, and cat; and 30%-60% was bound in goat, horse, lamb, bovine, dogfish, turtle, frog, turkey, duck, pigeon, goose, and chicken. Of the purified bovine protein fractions studied, α globulin (fraction IV-1) demonstrated the highest degree of binding (58%). All other fractions tested bound the drug from 20% to 50%. Biliary transport studies in rats showed that this was a major route of excretion of camptothecin. The high bile/plasma ratios, the saturation properties of this report system, and the use of anionic drugs as inhibitors of biliary transport indicated that this process occurred in part from active processes. The pharmacologic, toxicologic, and therapeutic implications of these distribution, binding, and transport studies are discussed.

L6 ANSWER 31 OF 35 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1972:154608 BIOSIS
DOCUMENT NUMBER: PREV197253054608; BA53:54608
TITLE: TRANSAMIDATING ENZYMES PART 1 RAPID CHROMATOGRAPHIC ASSAYS.
AUTHOR(S): LORAND L; CAMPBELL L K
SOURCE: Analytical Biochemistry, (1971) Vol. 44, No. 1, pp. 207-220.
CODEN: ANBCA2. ISSN: 0003-2697.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable

L6 ANSWER 32 OF 35 TOXCENTER COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:114494 TOXCENTER
COPYRIGHT: Copyright 2005 ACS
DOCUMENT NUMBER: CA04317037424E
TITLE: Research in agriculture
AUTHOR(S): Taggart, W. G.; Forbes, I. L.
SOURCE: Louisiana Agr. Expt. Sta. Ann. Rept., (1949) pp. 3-153.
DOCUMENT TYPE: Journal
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1949:37424
ENTRY DATE: Entered STN: 20030513
Last Updated on STN: 20040217

AB Progress repts. are made, of which the following are of chemical interest: surface activity of biotin; turbidity and titration methods of measuring growth of Lactobacillus casei in presence of lipide stimulants; efforts to isolate the lathyritic factor of the singletary pea; phys. and chemical changes in milk fat and egg yolk during freezing storage; comparison of ascorbic acid content of whole blood and **plasma** as criteria of nutritional studies; tryptophan and ash changes in frozen **shrimp**; bacterial count of peeled and unpeeled frozen **shrimp**; dehydrated sweet potatoes as a feed for fattening **swine**; fertilization of rice, sugar cane, and soybean (including minor elements and rates of absorption); effect of

dilution rate on bull semen efficiency; effect of sprinkling cows with a fine mist to reduce body temperature and increase milk production; regional factors affecting composition of milk; blood studies of Red Sindhi-Jersey crossbred cattle; malnutrition of dairy cattle; comparison of Ca arsenate-nicotine and a mixture of benzene hexachloride-DDT-S for boll-weevil control; destructiveness of chlorinated compns. to beneficial insects; disadvantages of benzene hexachloride, toxaphene, parathion, and chlordan on sugar cane; effectiveness of parathion against fall armyworm and lesser cornstalk borer; comparison of chlordan and Ca arsenate for control of sweet potato weevil; benzene hexachloride, chlordan, and pyrethrum-piperonyl cyclonene for control of onion thrips; control of the sand wireworm; nutritional status of Louisiana people of various age groups; high-temperature strain of Phytophthora infestans; internal cork or sweet potatoes; control of sweet potato black rot; organic fungicides for the control of cucumber diseases; effect of fungicides on the color of lily bulbs; pullorum-typhoid complex in chickens; anaplasmosis in cattle; liming of strawberries; insecticides for cabbage caterpillars.

L6 ANSWER 33 OF 35 TOXCENTER COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1947:2277 TOXCENTER
COPYRIGHT: Copyright 2005 ACS
DOCUMENT NUMBER: CA04122038443F
TITLE: Research in agriculture, annual report 1945-1946
AUTHOR(S): Taggart, W. G.; Forbes, I. L.
CORPORATE SOURCE: Baton Rouge, LA.
SOURCE: Louisiana Agr. Expt. Sta. Ann. Rept., (1947) pp. 3-121.
DOCUMENT TYPE: Journal
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1947:38443
ENTRY DATE: Entered STN: 20011116
Last Updated on STN: 20030610

AB cf. C.A. 41, 1791f. The results of the following exptl. studies are briefly reported: **plasma** ascorbic acid, **plasma** protein, and hemoglobin values of high school girls, the diets and **plasma** ascorbic acid levels of pregnant women in South Central Louisiana, utilization by human beings of ascorbic acid from mustard greens, oleic acid as a growth stimulant for Lactobacillus casei, lathyrism produced in rats by ground Singletary peas, toxic principles of the tung nut, freezing storage of okra, unbaked biscuits and cakes, and apple and peach pies, bacteriol. and chemical studies of the cooking and freezing of **shrimp**, use of petroleum ether for determining drip of frozen products, use of ascorbic acid, glutathione, pectin, and CaCl2 in freezing strawberries and strawberry juice, butane and propane flame cultivation, dehydrated sweet potatoes for fattening **swine**, hill land pasture investigations, creep feeding of calves, Singletary pea meal as a protein supplement, rice fertilization, sugar-cane fertilization, various sources of N for cotton, greenhouse studies of major and minor plant elements, N changes in flooded soil planted to rice, rates of sulfofication and effects of grades of agricultural S in soils, pasture improvement with manure, bodily changes in cows during artificial cooling in hot weather, heat tolerance of Jersey and Holstein cows, seasonal comparison of nutritive content of carpet and Dallis grasses, normal blood values of Louisiana dairy cattle, controlling bollworms with DDT, benzene hexachloride for the control of cotton insects, 2,4-D, dinitro-o-sec- butylphenol, ammonium sulfamate, NaF, Ca fluosilicate, and Na pentachlorophenate as eradicants of the field hosts of the

sweet-potato weevil, comparison of benzene hexachloride, "3956," Ryanex, and cryolite for sugar-cane-borer control, nicotine as a cucumber-dust ingredient, control of tomato fruitworm with DDT and cryolite, comparison of DDT, benzene hexachloride, and "1068" for the control of velvetbean caterpillar on soybeans, production of okra seed for oil, cover crop and fertilizer expts. with peaches, carotene and protein content of sweet-potato leaves and vines, controlling alligator weed in sugar cane with 2,4-D, control of spurweed or "burgrass" (Soliva sessilis), oils as weed killers, control of soil rot of sweet potatoes with S, internal cork of sweet potatoes, black rot of sweet potatoes, black scale disease of Easter lilies, shallot and onion-disease studies, root rot of sugar cane and antibiosis, new races of Cercospora oryzae on rice, control of downy mildew of cucumbers and of azalea-flower blight, okra-seed meal in chick rations, improving the quality of market poultry with hormonal substances, single-vegetable-protein laying rations, Johne's disease in cattle, anaplasmosis in cattle, gastrointestinal parasites of cattle and of horses and mules, fertilizing corn and sweet potatoes, Johnson grass as pasture, cotton dusting tests, soil improvement, rice fertilization and mulching, residual effects of Ca arsenate on cotton and rice, use of chlorinated camphene for control of cabbage caterpillar and turnip aphid, and the sugar concns. of 20 Louisiana honey plants.

L6 ANSWER 34 OF 35 FEDRIP COPYRIGHT 2005 NTIS on STN
ACCESSION NUMBER: 2005:157082 FEDRIP
NUMBER OF REPORT: AGRIC 0405213
RESEARCH TITLE: FEED INGREDIENTS FROM FISH PROCESSING WASTES
STAFF: BECHTEL P J
PANTOJA A
PERFORMING ORGN: AGRICULTURAL RESEARCH SERVICE, FAIRBANKS, ALASKA, 99701
FUNDING: USDA INHOUSE |c D
FILE SEGMENT: Department of Agriculture
SUM 1)Characterize the waste sources and economics associated with Alaskan fish processing wastes. 2)Characterize individual waste stream components and their products. 3)Develop new aquaculture feed ingredients and products from fish processing wastes.The work will be conducted in cooperation with University of Alaska and other cooperators.FY02 Program Increase. Add 1 SY. Characterization will include fish processing wastes generated by species, general processing locations, on-shore vs. factory trawl processing,time of year and amounts of individual waste stream components.Current waste disposal methods and waste processing will be characterized. Innovative methods for the collection and storage of the fish processing wastes will be developed. stream will be used to create a number of new feed ingredients and other products. Processing technologies will be adapted or developed as needed. The new protein feed ingredients and other products will be chemically characterized (amino acid and fatty acid profiles, mineral and contaminant content,proximate analysis and other analysis) and nutritionally valuated (protein digestibility, nutritional value and palatability attributes) in fin fish and **shell fish** aquaculture systems. scientific and popular press articles, presented at meetings and workshops and disseminated by marine advisory program personnel. Formerly 5341-31410-001-00D (11/01). FY04 Program Increase.PR resolving it (summarize project aims and objectives)? problem? What does it matter? More than 60% of the total fish harvested in the United States comes from Alaska and the three major species harvested

are Alaskan pollock, Pacific cod, and salmon. over one million metric tones of fish by-products most of which could be utilized as aquaculture and animal feeds. (heads, viscera, skin and frames) are underutilized and often create disposal problems and environmental concerns. Simultaneously, there is a need for fish protein feed ingredients and palatability enhancing agents for use in aquaculture systems. Sources of fish processing waste include land based processing plants, catcher processor ships and large factory ships. Much of the fish processing is done in and around the coasts of the Bering Sea and the Gulf of Alaska. and fish oil but much fish waste is disposed of in the sea. For some land based processing plants by-product disposal is a problem due to environmental issues and disposal costs. of more fish waste as aquaculture and animal feed ingredients. reduce waste and environmental concerns, lead to new income sources for processors and harvesters, and provide additional feed ingredients for the aquaculture and livestock industries. This project seeks to improve the utilization of Alaska fish processing wastes by creating by-products for use in livestock and aquaculture diets. This will be accomplished by analysis and processing of the various by- product components using both new and existing technologies. processing, stabilization, storage, and formulation of the feed ingredients. 2. List the milestones (indicators of progress) from your Project Plan. There are currently no official milestones pending OSQR review of the proposed project plan. to improve the accuracy of estimates of Alaskan by- products and by product components. B. Complete analysis of waste stream components from processing Alaska Pollock, pacific cod, and/or pink salmon. C. Complete feeding studies in trout and other farm animals of commercially available fish waste stream components; including, heads, viscera, frames, skins and hydrolyzed by-products from pollock, cod and salmon. D. Develop and evaluate feed ingredients made from underutilized pollock and cod skins and viscera, and viscera components. E. Evaluate the properties of hydrolyzed by-products and stick water fractions as feed ingredients. 3. Milestones: A. properties of analyzed included heads, viscera, frames and skin from pollock and cod, and heads and viscera from pink salmon. B. viscera, frames, skin and salmon by-products including viscera and heads were evaluated as feed ingredients with trout in collaboration with Dr. Hardy. digestibility and analyzed. C. 1. A feed binding ingredient has been made from pollock skin. assay has been developed to evaluated the feed binding characteristics of the skin product. feeds. 2. A viscera. can be utilized with and nutritional properties of liver protein from a number of marine cold water fish spies have been evaluated in collaboration with Dr. Oliveira. addition, a lower fat liver protein material from whitefish has been prepared for evaluation as an aquaculture feed ingredient. D. 1. Studies on the chemical and nutritional properties of pollock and salmon stickwater protein have been completed and published. hydrolyzed prior to concentration. 2. Both protein powders and hydrolysates have been made from pollock and salmon by-products. have been chemically and nutritionally characterized in collaboration with Dr. Sathivel. pollock and salmon by-products using alkali extraction procedures. b. List the milestones (from the list in Question #2) that you expect to address over the next 3 years (FY 2005, 2006, & 2007). by year, over the next 3 years under each milestone? There are currently no official milestones pending OSQR review of the proposed project plan. Objectives and three year milestones in the proposed project follow: 1. Elucidate the chemical, biological, and physical properties of underutilized Alaska fish by-products and their biochemical constituents to identify

properties/compounds that can be used to make new and improved aquaculture and agriculture feed ingredients, and other high value products. A. Analyze of by-product from flat, rock, cartilaginous fish (05, 06) B. Analyze seasonal variation of the by-product stream (07) C. Characterize tissue and organ components (05, 06, 07) D. Characterize protein from organs and extracted proteins (05,06,07) E. Characterize lipid from organs and by-products (05,06,07) F. Characterize properties of hydrolysates (05,06,07) G. Characterize stick water properties (05,06) 2. Improve processes and methods for analysis, collection, and storage of raw materials, to retain the chemical, biological, and physical qualities of Alaska fish processing raw materials for developing new and improved ingredients/biochemicals. A. Evaluate raw material quality and its effect on meals and oils (05,06, 07) B. Effects of storage time and temp. on by-product components (05,06,07) 3. Make and evaluate the value of new and improved aquaculture and agriculture ingredients and feeds from underutilized Alaska seafood by- products and their constituents. A. Aquaculture nutritional value of protein ingredients (05,06,07) B. Aquaculture nutritional value of lipid ingredients (05,06,07) C. Aquaculture palatability and attractant properties (05,06,07) D. Feed binding ingredients (06) E. Use of by-product ingredients in livestock feeds (05,06,07) F. Nutritional ingredients for early stages of pet growth (05,06,07) G. By-product ingredients for ornamental fish (06, 07) 4. What were the most significant accomplishments this past year? A. Over one million metric tons of fish processing by-products is produced each year from fish harvested in Alaska; however, much of this protein is not utilized and during the manufacturing of fish meal the soluble protein fraction, called stickwater, is often discarded. Scientists in the Subarctic Agriculture research Unit, Fairbanks, AK. evaluated the composition and properties of the large amount of soluble protein generated during the production of fish meal and chemically and nutritionally chracterized the stick water obtained from a commercial fish meal plant. Dried samples had high protein contents of which approximately 25 % was connective tissue protein. This study indicated that proteins in stick water have interesting chemical and nutritional properties, which could be utilized in both food and non-food applications. B. Viscera, a major by-product of fish waste, contains substantial quantities of liver, and in Alaska most fish liver is made into fish meal and oil or discarded. Efforts to separate liver from other by-products during fish processing and utilizing them in high value products are lacking. Research examined the properties of liver protein isolated from the livers' of six different species of cold water marine fish including Arrowtooth Flounder, Pacific Halibut , Alaska Pollock, Pink Salmon, Flathead Sole and Spiny Head Rock Fish. and different species of fish were found to have many similar chemical properties as well as useful nutrition properties that can be exploited for commercial application. Pink salmon is harvested in large volumes in Alaska and the major fish processing by-products are heads and viscera, which are good raw ingredients for making hydrolysates. Research conducted in the Subarctic Agriculture Research Unit, Fairbanks, AK. yielded hydrolysates that contain all of the powders with good flow characteristic were made from both pink salmon heads and viscera without removal of fat. These protein ingredients had a number of desirable chemical, physical and nutritional properties. C. Significant activities that support special target populations. None D. This report serves to document research conducted with Drs. McKeith and Ellis of the University of Illinois titled A Nutritional Value of Processed Fish Byproducts for Young **Pigs**

(SCA 58-5341-2-845). One use of proteins and peptides from fish processing by-products is as feed ingredients for early weaning **pigs**. Early weaned **pigs** have less developed immune and digestive systems, which has created an opportunity for new feed ingredients. Currently dried **plasma porcine** is one of the expensive minor feed ingredients fed early weaned **pigs** . This project evaluated the use of fish meal and hydrolyzed fish proteins as a substituted for animal **plasma** in the ration of early weaned **pigs** thus creating a potential new market for these fish processing by-products. digestibility study and a growth performance study. The apparent ileal digestibility of amino acids from the different fish by-products were measured in piglets fitted with T-cannulas in the terminal ileum. Results showed that overall the hydrolyzed salmon heads, hydrolyzed salmon viscera and white fish meal were not different ($p>0.05$) for the average apparent ileal amino acid digestibility compared to spray-dried animal **plasma**. young **pigs** weaned at 20.5 days of age and fed diets containing the test fish protein products or spray-dried **porcine** **plasma** were compared. the **pigs** fed the spray- dried animal **plasma** grew faster; however, there was no effect of dietary treatment on gain:feed ratio suggesting that most of the reduction in overall growth rate with a number of the fish meal based diets resulted from reduced feed intake rather than any reduction in efficiency of nutrient utilization. thesis of S. R. Tuftedal (see #7 below). utilizing hydrolyzed pollock and salmon by-product meals with partial substitutions for freeze dried animal **plasma** and an evaluation of ingredient palatability characteristics. 5. Describe the major accomplishments over the life of the project, including their predicted or actual impact. This project was requested by Congress in 1999 and the staffing of the ARS vacancy was completed in May 2000. facilities at the University of Alaska in Fairbanks and Kodiak were completed in FY 2001. A. Analysis of the amounts, types, location, and further processing of fish processing by-products in Alaska has been completed and used to identify important areas for future studies. B. Characterization of the chemical and nutritional properties of fish processing by-product components that are produced in large quantity has been completed, including skin, frames, heads and viscera from pollock and cod, and heads and viscera from salmon has been completed. Meals made from individual pollock by-products including heads, viscera, frames, skin and salmon by-products were evaluated in digestibility and possible to create products to fit niche markets by using different by- products or by combining selected by-products. saved or processed it may be possible to use selected by-products to make higher valued products. C. Specialized feed ingredients have been made from stickwater, fish skin, fish viscera components such as liver, and are being evaluated as feed ingredients. D. The chemical and nutritional properties of liver protein and fat from a number of marine cold water fish spies have been evaluated in collaboration with Dr. Oliveira. E. In collaboration with Dr. Sathivel both protein powders and hydrolysates have been made from pollock and salmon by-products. nutritionally characterized and have potential as high quality feed ingredients. 6. What science and/or technologies have been transferred and to whom? When is the science and/or technology likely to become available to the end- user (industry, farmer, other scientists)? known, to the adoption and durability of the technology products? Studies from this project have been presented to interested parties within Alaska and at national and international meetings and published. These studies provide new knowledge about selected by-product components, which is being used to create new and improved

feed and food products A. Analysis of the amounts and sources of individual fish by-product components in Alaska have been given to processors and state government employees and presented and made available to interested individuals and groups. B. The chemical and nutritional analysis of different by-product components has been presented at national and international meetings and published in scientific journals. has also been made available to processors and those further processing by-products. C. Several companies that manufacture products from by-product have expressed interest in using pollock and cod other intact and hydrolyzed protein ingredients from fish by-products such as viscera and liver for aquaculture, farm animal and pet diets. 7. List your most important publications in the popular press and presentations to organizations and articles written about your work. Presentations and Articles: Other joint authorship presentations and proceedings are listed under project 5341-31410-002-02G, and 5341-31410-002-01S P. J. Bechtel. 2004. Properties of stick water protein from fish processing by-products. 2004 Institute of Food Technologist Meeting Book of Abstracts. P. J. Bechtel and A. C. M. Oliveira. 2004. Properties of liver protein from different fish species. 2004 Institute of Food Technologist Meeting Book of Abstracts. P. J. Bechtel, S. Sathivel, A.C.M. Oliveira, S. Smiley, and J. Babbitt. 2004. Nutritional Properties of Dried Hydrolysates from Pink Salmon Heads and Viscera. World Aquaculture Society meeting 2004 ' Hawaii. P. J. Bechtel. 2004. Nutritional Properties of White Fish Processing Byproducts: Heads, Frames, Viscera and Skin. World Aquaculture Society meeting 2004 ' Hawaii.. Bechtel, P.J. 2003. Aquaculture and Livestock Feed Supplements from Alaska Fish Processing Byproducts. Feedinfo News Service. 8 Dec 2003. Scientific Reviews section. Pp. 1-5. http:www.feedinfo.com/Console/PageViewer.asp x?page=35804. Publications: Other joint authorship publications are listed under project 5341-31410- 002-02G, and 5341-31410-002-01S Thesis: S.R. Tuftedal 2004. The effect of feeding various fish meals compared to spray-dried animal **plasma** on the growth performance and amino acid digestion of newly weaned **pigs**. Thesis. Masters of Science in Animal Sciences. University of Illinois at Urbana-Champaign.PB

L6 ANSWER 35 OF 35 FEDRIP COPYRIGHT 2005 NTIS on STN
ACCESSION NUMBER: 2005:155194 FEDRIP
NUMBER OF REPORT: AGRIC 0403200
RESEARCH TITLE: AQUACULTURE AND LIVESTOCK FEED SUPPLEMENTS FROM FISH PROCESSING WASTES
STAFF: BECHTEL P J
SCHELL D M
SHANNON M C
PERFORMING ORGN: UNIVERSITY OF ALASKA, FAIRBANKS, ALASKA, 99775
FUNDING: USDA CONTRACT |c U
FILE SEGMENT: Department of Agriculture
SUM Characterize quantity, source, utilization, and value of fish processing by-products. Characterize by-products components for incorporating into animal feed. produce high quality, low ash, protein for feed supplements. Develop methods to prevent spoilage of fish processing by-products before processing. methods to extract high value co-products from fish processing by-products. Sources, sinks, problems, and opportunities for economically sound utilization of Alaskan fishery by-products will be characterized. physical, chemical, nutritional values and contaminants of selected fishery by-products, including seasonal variation will be characterized. In part, the comparison will be amino acid profiles, fatty acid profiles, mineral

composition, and lipid and protein quality assay. collection, storage, reconstitution, and processing methods will be developed for fishery by-products. intermediates, bone removal, and membrane filtration to create improved protein feed supplement products. alternative feed ingredients and feed formulations for aquaculture and livestock will be assessed. digestibility, nutrient availability, nutritional value stability and storability.Formerly 5341-31410-001-02G (1/02). Documents Grant with U. of Alaska.PR resolving it (summarize project aims and objectives)? problem? What does it matter? The Alaskan fishing industry produces over one million metric tons of by- product and waste annually. potential value as a protein and natural products source but is only minimally used. existing secondary products and to develop new and higher value materials for feed ingredients for animal (agriculture and aquatic) feed. Currently almost all of the fishery waste from large processors is converted to low value, high ash meal for sale abroad. Meal production is considered a cost of doing business and has not yet become recognized as a significant source of revenue. Much of the waste from smaller processors is disposed using the grind and dump method. pollock make the development of best-use end products urgent. 2. List the milestones (indicators of progress) from your Project Plan. There are currently no official milestones pending OSQR review of the proposed project plan. Milestones from previous annual reports are listed: A. Identify supply and availability of existing raw by-products of processing in Alaska's Seafood Industry (whitefish, salmon). B. Evaluate processes for making higher quality (value) secondary products (fish meal, stickwater, oil and bone), from seafood by-products. C. Characterize physical, chemical and nutritional properties of existing secondary products as ingredients for animal feeds and other agricultural and aquaculture products. D. Identify, characterize and prioritize potential applications for existing fish by-products and/or innovative hydrolysate products (gonadal hydrolysates, fractionated fish oil, carotenoid pigments) as ingredients for animal feeds and other agricultural and aquaculture products. E. Modify processes to optimize the quality of secondary products for use in feeds and to increase production to demonstration scale. F. Develop innovative ecosystem based aquaculture processes to better utilize fish by-products G. Document market specifications for secondary products from fish processing by- products (pesticides, PCBs, etc.) H. Assess economic viability and impact of new technologies for producing and utilizing innovative secondary products and feeds I. Extend feeding trials to marketability of fish raised of by-products for final feeding and extension of plant based feed J. Develop educational and information transfer programs and demonstrate technologies to the Alaskan Seafood Industry, as well as other stakeholders and partners. 3. Milestones: a. List the milestones (from the list in Question #2) that were scheduled to be addressed in FY 2004. substantially meet in FY 2004 and indicate which ones were not fully or substantially met, briefly explain why not, and your plans to do so. The following are from the Year 5 Research Plan and all milestones under FY 2004 were addressed and are listed below: D. 1. The goal was to develop and chemical characterize specific secondary products derived from the enzymatic hydrolysis of the by-products of fish processing for application in feeds and fertilizers. The Fishery Industrial Research Center (FITC), in coordination with the University of Idaho (UI), had a series of hydrolysates made by Bio-Oregon from Alaska raw materials. UI is evaluating these ultra-low ash fish meal in aquaculture feeds. Fertilizer were also obtained from Bio-Oregon and shipped to the island of Hawaii, where work has commenced and a report will be made

by the termination of the project. 2. The goal was to develop and chemical characterize stickwater enhanced fish meals for application in aquaculture feeds. FITC made pollock stickwater augmented (0, 10, 20, and 40% protein/protein substituted) fish meals. These meals were shipped to The Oceanic Institute (OI) and growth trials were conducted with the stickwater enhanced fish meals in diets for fish and **shrimp**. Data is being collated and final report is being written. 3. The goal was to characterize seasonal and species specific changes in stickwater, derived from the by-products of fish processing, for application as an appetite enhancer in feeds. concluded that drying stickwater that was not enzymatically digested to a powder is not cost effective at this time. Except for the freeze-dried material, all processes failed; the end products were either burned or severely caramelized. salmon stickwater was not satisfactory due to logistics issues surrounding its manufacture. Currently pink salmon are being used to make the dried stickwater from that source. We are delaying the shipment of these products for nutritional testing until we can forward all experimental materials at the same time. The Oceanic Institute will analyze the attractant properties of all stickwater samples by season and species, and currently the attractant properties for **shrimp** of one freeze dried sample is being determined. 4. A wide range of species specific and season specific fish meals made in Alaska have been characterized and subject to nutritional testing. In addition in collaboration with USDA/ARS, we have made protein meals from a variety of specific organs derived from the byproducts of seafood processing. As these meals have been characterized they have been sent to the OI and UI for nutritional testing. Initial growth trials at OI have been completed and preliminary sensory evaluation conducted. Optimization growth trials were initiated; however, the tanks proved unsuitable for these fish and there was a need to restart the trial with appropriate tanks. 5. Chemical analysis of fish oils for C20:1w11 & C22:1w11 fatty acids has been completed and enrichment experiments are underway. The Oceanic Institute will evaluate the enriched oils in **shrimp** growth trials, and UI will conduct fish feeding/photoperiod studies. E. 1. Hydrolysates have been made from the by-products of seafood processing for use as for aquacultural feed ingredients and fertilizers. Hydrolysates have been made by Bio-Oregon Inc. from spring pollock, red salmon, pink salmon and fall pollock, and flatfish by-products. **Shrimp** growth trials have been completed and attractant trials are in progress. Trout feeding trial designed to maintain levels of anabolic steroids that are naturally present in fish meal when portions of fish meal are replaced with soybean and corn gluten meals have been initiated. In addition, growth trials were completed using early-weaned piglets in which fish hydrolysate meals replaced part of the **porcine plasma** protein. Meals were made from salmon testes by first cooking the tissue and then drying in a vacuum evaporator. Analysis of pollock viscera, salmon head meal and salmon gonad meal for testosterone levels were completed. A feeding trial designed to maintain levels of anabolic steroids that are naturally present in fish meal when portions of fish meal are replaced with soybean and corn gluten meals has been initiated. 2. The goal was to optimizing use and value of Alaskan seafood by- product fish oil to enhance omega-3 fatty acid levels of farmed fish. Pollock, and rockfish oils have been collected and characterized and we are waiting the pink salmon season to complete collection and characterization of early season and late season salmon oils. UI will examine these oils in fish feeding/photoperiod studies, and OI will examine their use in **shrimp** growth trials. 3.

Fish protein chemistry and nutritional characteristics The physical, nutritional, thermal, and rheological properties of five different batches of Alaska white fish meals were evaluated. Physical and nutritional properties of the fish meals were found to be relatively consistent. Fish meal, fish bone meal and fillet meal protein are being produced in order to compare their value in both fish and **shrimp** growth trials. experiments were conducted to hydrolyze bone protein and recover it from bone meal. Alcalase is being used to digest the bone proteins and the aqueous fraction produced will be dried on a laboratory scale drum dryer. F. The goal was to develop innovative ecosystem based aquaculture processes to better utilize fish by-product. A trial to evaluate the role of particulate matter in **shrimp** culture is completed and data analysis is in progress. evaluate the role of pond algae vs bacteria and detritus in **shrimp** culture has been completed and is being analyzed. And the trial to evaluate direct uptake and assimilation of ammonium from seawater has been completed. I. product quality and consumer acceptance of fish fed Alaska by- products. A consumer acceptance trial is scheduled to follow completion of the current feeding trials that utilize high steroid ingredients. J. Develop educational and information transfer programs and demonstrate technologies to the Alaskan Seafood Industry, as well as other stakeholders and partners. information materials about the byproduct utilization program have been prepared for use by University of Alaska Marine Advisory Agents when working with the Alaska fishing industry. stakeholders are being surveyed, and new demonstration projects are being identified. B. List the milestones (from the list in Question #2) that you expect to address over the next 3 years (FY 2005, 2006, & 2007). expect to accomplish, year by year, over the next 3 years under each milestone? This project will be terminated and the new milestones are listed in under 5341-31410-002-00 4. What were the most significant accomplishments this past year? A. Soybean meal is a major dietary constituent of farmed fish diets, but problems with palatability limit its use. Scientists in the Subarctic Agriculture Research Unit, Fairbanks, AK, in collaboration with the University of Idaho, with soybean meal that enhanced the palatability of rainbow trout diets. Research provided a solution for soybean based palatability, and seeks to identify specific properties or constituents of fish hydrolysate that are responsible for enhancing palatability. Research should lead to the development of high-value products from Alaskan fish processing waste for future use in plant protein-based diets for many carnivorous species of farmed fish, and increase economic returns to seafood processors in Alaska. B. Utilization of Alaskan fish waste, particularly fish testes, is critical for the Alaskan Fish Industry. Scientists in the Subarctic Agricultural Research Unit, Fairbanks, AK produced fish testes meal at the pilot plant level and carried out its characterization. It was found that steroids, both anabolic and reproductive, were present in significant quantities in these meals. The testes meal could serve to stimulate the immune system in cultured salmonids. Research would lead to healthier fish with improved resistance to mircobial infections. The degree of hydrolysis (DH) is an important characteristic of fish protein hydrolysates because it influences peptide length, nutritional properties and other peptide characteristics. Scientists in the Subarctic Agicultural Research Unit, Fairbanks, AK evaluated the hydrolysis of salmon heads by different enzymes and determine the effect of different enzymes on percent oil recovery. The degree of hydrolysis of red salmon heads after 75 minutes of hydrolysis, ranged from, 16.1 to 6.4 % with the two highest values recorded for Neutrase and Alcalase. Recovery of oil

from the red salmon heads ranged from 5.5 to 10.6 % and was affected by both incubation time and enzyme type. This study showed that different enzymes as well as the length of incubation influenced both the DH values and oil yield from red salmon heads. Replacement of traditional fish meals, which are often imported with fish meals made from by products of the Alaska fish processing industry, will enhance Alaskan economy. Scientists in the Subarctic Agricultural Research Units, Fairbanks, AK found that the nutritional quality of Alaska fish meal for Longfin amberjack was high in two growth trials. The growth and survival of the fish fed the diet containing the Alaska meal was similar to those fed the commercial feed and the liver lipid levels were lower in the Alaska fish meal feed than in those fed the commercial feed. The information generated from this work could be instrumental in persuading aquatic feed manufacturers to utilize fishwaste from Alaska in fish diets. Impact of diet on the flavor and texture of fish is critical. Scientists in the Subarctic Agricultureal Research Unit, Fairbanks, AK conducted a preliminary trial to establish baseline information on flavor and texture attributes of market size (4-6 kg) amberjack reared on two diets, a commercial feed (50% protein and 14% lipid), and an experimental feed prepared at Oceanic Institute with similar composition that used Alaska fishery by-products as the principal ingredient. Cooked amberjack fillet were presented to a trained sensory panel at the University of Hawaii, Manoa for evaluation of appearance, texture and flavor qualities. Overall, the amberjack fillets had an attractive appearance and were moderate in all textural and flavor attributes, and no significant differences (P>0. 05%) were found in fish texture and flavor between the fish reared on the two diets. These results can serve as a basis for designing appropriate and cost-effective feeds for amberjack that can deliver consumer-approved product quality. There is need to optimize the use of Alaskan fishery by-product meal in **shrimp** diets and examine the functional and contributory roles of the bacterial and phytoplankton components in **shrimp** culture systems. Scientists in the Subarctic Agricultural Research Unit, Fairbanks, AK examined the **shrimp** nitrogen assimilation via bacterial and algal pathways by either removing or separately examining bacterial and algal pathways using stable isotope tracers. The mass spectrometry of the **shrimp** carcasses and chemical analysis of the culture water are pending, however, by contrasting the incorporation pattern from the feeds with and without the microbial components, it was possible to better define the relative roles of the feed and the microflora. Research will improve the use of fishery by-products in an environmentally and economically sound manner. Efforts are needed to utilize Alaskan fish waste in animal diets as a substitute for imported or expensive diets. Scientists in the Subarctic Agricultural Research Unit, Fairbanks, AK carried out feeding trials with early-weaned piglets in which fish hydrolysate meals replaced **porcine plasma** protein. Studies demonstrated that partially-hydrolyzed fish protein from Alaska seafood waste could partially replace **porcine plasma** protein, worth between $1500 and $2500 per ton, in diets for early-weaned **pigs**. Research will provide economic return to Alaskan seafood processors. C. Significant activities that support special target populations. FITC is engaged in a project with the School of Fisheries and Ocean Sciences Juneau Center to evaluate how well specific feed formulations, coupled with lowered water temperature can affect growth rates in salmon smolts being cultured in the Private Non-Profit hatchery system in Alaska. This is funded through another source. D. subordinate projects 5. Describe the major

accomplishments over the life of the project, including their predicted or actual impact. The analytical, nutritional, and physiochemical capabilities of the University of Alaska Fairbanks, the University of Idaho and the Oceanic Institute were upgraded and each institute was assigned primary research responsibilities. The addition of stickwater to presscake was demonstrated to improve the nutritional quality of whitefish meals made from by-products of the Alaska fish processing industry for rainbow trout, Pacific threadfin and Pacific white **shrimp**. Selected fish meals made from by-products of the Alaska fish processing industry were found not to contain detectable levels of pesticides and PCBs. Alaskan fish meal, made under standard conditions from the byproducts of food processing, are as good as or better nutritionally than the best meals currently available to aquaculturists. We are developing an array of production options to convert seafood waste into various products, at varying costs and with varying values to the producer. These products are designed for use in aquaculture and agriculture. We are also in communication with various segments of the Alaskan seafood industry (harvesters, land-based and at-sea processors, municipalities, state agencies), informing them of the results of our work towards making the highest and best use of their seafood waste. The information we develop will significantly contribute to higher recovery and utilization of landed catch of Alaskan fish, and increase the economic return to the seafood industry. Our chemical characterizations, coupled with the nutritional characterizations of these fish meals, will document the efficacy of Alaskan fish meals compared to meals made from whole industrial fish, and also contribute to the development of higher value proteins from components of the fish processing byproduct waste stream. 6. What science and/or technologies have been transferred and to whom? When is the science and/or technology likely to become available to the end- user (industry, farmer, other scientists)? to the adoption and durability of the technology products? Use of low-ash fish meal from Alaskan seafood processing waste is now being produced by BioOregon and successfully marketed to the US trout feed manufacturing industry for use in low-pollution trout feeds (Clear Springs Foods, Inc., purchases this product). The importance of fish solubles derived from stickwater or the inclusion of stickwater (which is often discarded at present) in improving nutritional quality of fish meal has been disseminated to industry. The high nutritional quality of Alaskan whitefish meals and salmon meals, established using scientific research trials in rainbow trout, Pacific threadfin and **shrimp**, has been disseminated to industry. The chemical characterization of the meals and oils derived from hydrolysates made from whitefish and salmon has been disseminated to industry. 7. List your most important publications in the popular press and presentations to organizations and articles written about your work. Presentations, Articles, Proceedings Babbitt, J.K., Smiley, S., Bechtel, P.J., Hardy, R.W. and Forster, I. 2004. technologies for producing feed ingredients from fish byproducts. of World Aquaculture Society 'Aquaculture 2004' March 1-4, 2004, Honolulu, Hawaii, page 38. Forster, I., W. Dominy, S. Smiley, P. Bechtel, R. Hardy and J. Babbitt. Recent advances in utilization of fish byproducts in aquaculture feeds. Presented at the annual meeting of the World Aquaculture Society. Honolulu, Hawaii, 2-5 March 2004. Hardy, R.W. 2003. By-product Conference. Aquaculture Magazine 22(1): 59-62. Obaldo, L.G., A.R. Kamarei, and A.S. Huang. amberjack. S, Bechtel, P.J., Babbitt, J.K, and Crapo, C. Properties of soluble and insoluble protein from arrowtooth flounder (Atheresthes stomias). IFT 2004 annual meeting, Las Vegas Convention Center, Las Vegas, Nevada.

Sathivel, S. Properties of Pollock oils. IFT 2004 annual meeting, Las Vegas Convention Center, Las Vegas, Nevada. Sathivel, S, Bechtel, P.J., Babbitt, J.K., Smiley, S., and Negulescu, I. Properties of Alaska white fish meal from Pollock and cod fish processing byproducts. IFT 2004 annual meeting, Las Vegas Convention Center, Las Vegas, Nevada. Sathivel, S, Bechtel, P.J., Babbitt, J.K., Smiley, S., and Negulescu, I. Properties of insoluble protein powders from Pollock byproducts. IFT 2004 annual meeting, Las Vegas Convention Center, Las Vegas, Nevada. Sathivel, S., Smiley, S., and Bechtel, P.J. Effect of different enzymes on degree of fish protein hydrolysis and oil yield. IFT 2004 annual meeting, Las Vegas Convention Center, Las Vegas, Nevada. Smiley, S., & Smoker W. 2004. Ocean ranching: update on Alaska's salmon Aquaculture. World Aquaculture Society Annual Meeting, March 2004. Smiley, S., 2004. Research Needs of Alaskan Coastal Communities. ComFish Research Forum, March 2004. Smiley, S., 2003. Applied Fisheries Research in Alaska. Annual Meeting, Alaska State Chambers of Commerce. Kodiak, AK. October 2003. Oliveira ACM and Bechtel, PJ. 2004. Characterization of liver lipids from Alaska fish species. Full manuscript accepted for publication at the Proceedings from West European Fishery Technologist Annual Meeting. (In Press). Smiley, S., J.K. Babbitt, S. Divakaran, I. Forster, and A. de Oliveira. 2003. made in Alaska. International Seafood Byproduct Conference, November 2002, Anchorage. Bechtel, editor. Alaska Sea Grant College Program, University of Alaska Fairbanks (AK-SG- 03-01). Babbitt, and S. Smiley. by-products of the Alaska fishing industry in diets for Pacific white **shrimp** (Litopenaeus vannamei). 13:115-123. Li, P., Wang, X., Hardy, R.W. and Gatlin III, D.M. Nutritional value of fisheries by-catch and by-product meal in the diet of red drum (Sciaenops ocellatus). P.J., Babbitt, J.K, Prinyawiwatkul, W., Negulescu, I. Reppond, K.D. 2004. Properties of protein powders from arrowtooth flounder (Atheresthes stomias) and herring (Clupea harengus) byproduct. Journal of Agricultural and Food Chemistry. 52: 5040-5046. Awards Patterson, M. Developing arrowtooth flounder (Atheresthes stomias) protein powder mayonnaise. IFT 2004 Undergraduate research paper competition. Finalist. Advisor. Dr. Subramaniam Sathivel.CA

FILE 'MEDLINE' ENTERED AT 11:36:36 ON 22 NOV 2005

FILE LAST UPDATED: 16 NOV 2005 (20051116/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

L7 8 SEA FILE=MEDLINE ABB=ON PLU=ON (CRUSTACEA AND (IMMUNITY OR ALBUMINS))/CT

Searcher : Shears 571-272-2528

L7 ANSWER 1 OF 8 MEDLINE on STN
ACCESSION NUMBER: 2005314325 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15962468
TITLE: Immune functions in crustaceans: lessons from flies.
AUTHOR: Stet R J M; Arts J A J
CORPORATE SOURCE: Cell Biology and Immunology Group, Wageningen Institute of Animal Sciences, Wageningen University, Wageningen, The Netherlands.. rene.stet@wur.nl
SOURCE: Developments in biologicals, (2005) 121 33-43. Ref: 48
Journal code: 100940058. ISSN: 1424-6074.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200508
ENTRY DATE: Entered STN: 20050621
Last Updated on STN: 20050802
Entered Medline: 20050801
ED Entered STN: 20050621
Last Updated on STN: 20050802
Entered Medline: 20050801
AB In recent years insects, notably Drosophila, have emerged as a popular model for studying immune responses to bacterial and fungal pathogens. Due to the availability of the complete genome sequence, genome-wide scans of immune responses have been performed using microarray analyses. These analyses have revealed the presence of two major pathways: Toll and Imd. Each pathway consists of four steps: (i) recognition through pattern recognition receptors; (ii) modulation by serine proteases; (iii) signal transduction leading to translocation of transcription factors and (iv) humoral and cellular responses. We have compared the information from insects with those currently available in crustaceans, and have identified commonalities and differences. Remarkably, in both insects and crustaceans, little is known about their anti-viral responses. Future research will have to focus on these anti-viral immune responses ultimately to control viral diseases, which are at present a major threat to culturing penaeid shrimp.

L7 ANSWER 2 OF 8 MEDLINE on STN
ACCESSION NUMBER: 71226725 MEDLINE
DOCUMENT NUMBER: PubMed ID: 4253492
TITLE: Studies on broad spectrum agglutinins. IX. Specific and unspecific reactions between Limulus polyphemus haemolymph and snail extracts with "anti-A" specificity.
AUTHOR: Voigtmann R; Salfner B; Uhlenbruck G
SOURCE: Zeitschrift fur Immunitatsforschung, experimentelle und klinische Immunologie, (1971 Jun) 141 (5) 488-94.
Journal code: 7608241. ISSN: 0300-872X.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197108
ENTRY DATE: Entered STN: 19900101
Last Updated on STN: 19900101

Searcher : Shears 571-272-2528

Entered Medline: 19710807
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19710807

L7 ANSWER 3 OF 8 MEDLINE on STN
ACCESSION NUMBER: 71065115 MEDLINE
DOCUMENT NUMBER: PubMed ID: 4321418
TITLE: Variations in the C and G content in preparations of crab d(A-T) polymer.
AUTHOR: Simon M; Oki I; Chang H C; Lohr K; Lawkowski M Sr
SOURCE: Biochimica et biophysica acta, (1970 Nov 12) 224 (1) 253-5.
Journal code: 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197102
ENTRY DATE: Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19710210
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19710210

L7 ANSWER 4 OF 8 MEDLINE on STN
ACCESSION NUMBER: 69228108 MEDLINE
DOCUMENT NUMBER: PubMed ID: 5791603
TITLE: Immunity in the invertebrates. II. Adaptive immunity in the crayfish (Parachaeraps bicarinatus).
AUTHOR: McKay D; Jenkin C R
SOURCE: Immunology, (1969 Jul) 17 (1) 127-37.
Journal code: 0374672. ISSN: 0019-2805.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 196908
ENTRY DATE: Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19690821
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19690821

L7 ANSWER 5 OF 8 MEDLINE on STN
ACCESSION NUMBER: 68097664 MEDLINE
DOCUMENT NUMBER: PubMed ID: 4965512
TITLE: Serological responses among invertebrates other than insects.
AUTHOR: Bang F B
SOURCE: Federation proceedings, (1967 Nov-Dec) 26 (6) 1680-4.
Ref: 29
Journal code: 0372771. ISSN: 0014-9446.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English

Searcher : Shears 571-272-2528

FILE SEGMENT: Priority Journals
ENTRY MONTH: 196802
ENTRY DATE: Entered STN: 19900101
Last Updated on STN: 19980206
Entered Medline: 19680216
ED Entered STN: 19900101
Last Updated on STN: 19980206
Entered Medline: 19680216

L7 ANSWER 6 OF 8 MEDLINE on STN
ACCESSION NUMBER: 66094908 MEDLINE
DOCUMENT NUMBER: PubMed ID: 5905541
TITLE: The effect of infection by gram-negative bacteria, and their endotoxins, on the blood-clotting mechanism of the crustacean Sacculina carcini, a parasite of the crab Carcinus maenas.
AUTHOR: Barker W H Jr; Bang F B
SOURCE: Journal of invertebrate pathology, (1966 Mar) 8 (1) 88-97.
Journal code: 0014067. ISSN: 0022-2011.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 196605
ENTRY DATE: Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19660521
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19660521

L7 ANSWER 7 OF 8 MEDLINE on STN
ACCESSION NUMBER: 66077106 MEDLINE
DOCUMENT NUMBER: PubMed ID: 5323295
TITLE: Normal serum cytotoxicity for P32-labeled smooth Enterobacteriaceae. I. Loss of label, death, and ultrastructural damage.
AUTHOR: Spitznagel J K; Wilson L A
SOURCE: Journal of bacteriology, (1966 Jan) 91 (1) 393-400.
Journal code: 2985120R. ISSN: 0021-9193.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 196604
ENTRY DATE: Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19660409
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19660409

L7 ANSWER 8 OF 8 MEDLINE on STN
ACCESSION NUMBER: 66043986 MEDLINE
DOCUMENT NUMBER: PubMed ID: 4158601
TITLE: [Structure, topochemical behavior and physiological significance of granulated cells (so-called granule cells) from interstitial connective tissue in the foot

of Helix pomatia L. and its relationship to the secretion of protein-containing glands].
Struktur, topochemisches Verhalten und physiologische Bedeutung der granulierten Zellen (sogenannten Kornchenzellen) aus dem interstitiellen Bindegewebe des Fusses von Helix pomatia L. und ihre Beziehungen zum Sekret eiweisshaltiger Drusen.

AUTHOR: Schmidt R
SOURCE: Acta histochemica, (1965 Aug 14) 21 (5) 323-54.
Journal code: 0370320. ISSN: 0065-1281.
PUB. COUNTRY: GERMANY, EAST: German Democratic Republic
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: German
FILE SEGMENT: Priority Journals
ENTRY MONTH: 196602
ENTRY DATE: Entered STN: 19900101
Last Updated on STN: 19950206
Entered Medline: 19660206

ED Entered STN: 19900101
Last Updated on STN: 19950206
Entered Medline: 19660206

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, JICST-EPLUS, JAPIO, PHIC, PHIN, TOXCENTER, CANCERLIT, VETU, VETB, CABA, AGRICOLA, PASCAL, DISSABS, FEDRIP' ENTERED AT 11:38:05 ON 22 NOV 2005)

L8 24797 S ("HATTORI T"? OR "TSUNEO H"?)/AU
L9 65101 S ("TAKAHASHI Y"? OR "YUKINORI T"?)/AU
L10 1302 S ("TACHIKAWA Y"? OR "YOSHIHIRO T"?)/AU
L11 4 S L8 AND L9 AND L10
L12 77 S L8 AND (L9 OR L10)
L13 4 S L9 AND L10

L15 5 S (L12 OR L8 OR L9 OR L10) AND L4
L16 5 S L11 OR L13 OR L15
L17 3 DUP REM L16 (2 DUPLICATES REMOVED)

L17 ANSWER 1 OF 3 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
ACCESSION NUMBER: 2004-727719 [71] WPIDS
CROSS REFERENCE: 2002-518012 [55]
DOC. NO. CPI: C2004-255567
TITLE: Immunostimulator for disease and cancer prevention for animals and humans comprises **swine plasma** that expresses immunostimulative activity, preventing effect on infectious disease, and anti-tumor effect.
DERWENT CLASS: B04 C03 D13
INVENTOR(S): **HATTORI, T; TACHIKAWA, Y; TAKAHASHI, Y**
PATENT ASSIGNEE(S): (APCA-N) APC CO INC
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2004197342	A1	20041007	(200471)*		10

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2004197342	A1 Provisional	US 2000-191211P	20000322
	Cont of	US 2001-808840	20010315
		US 2003-699810	20031103

PRIORITY APPLN. INFO: US 2000-191211P 20000322; US 2001-808840 20010315; US 2003-699810 20031103

AN 2004-727719 [71] WPIDS

CR 2002-518012 [55]

AB US2004197342 A UPAB: 20041104

NOVELTY - An immunostimulator (I) comprises **swine plasma** that expresses immunostimulative activity, preventing effect on infectious disease, and anti-tumor effect on **crustacea**, fish, other animals and humans.

ACTIVITY - Cytostatic; Immunostimulant; Antimicrobial.

MECHANISM OF ACTION - None given.

USE - As an immunostimulator, for preventing infectious disease, and in cancer prevention for animals and humans.

ADVANTAGE - The immunostimulator shows a superior effect in immunostimulation, prevention of infection, and cancer prevention in very small amounts and is thus economical. It can be efficiently administered and used.

Dwg.0/0

L17 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2002:315372 HCAPLUS

DOCUMENT NUMBER: 136:319392

TITLE: Immunostimulator for animals and humans, and method of preventing animal and human infectious diseases and cancer

INVENTOR(S): **Hattori, Tsuneo; Takahashi, Yukinori; Tachikawa, Yoshihiro**

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002048608	A1	20020425	US 2001-808840		20010315
US 2004197342	A1	20041007	US 2003-699810		20031103
PRIORITY APPLN. INFO.:			US 2000-191211P	P	20000322
			US 2001-808840	A1	20010315

AB The goal of the present invention is to provide substances to prevent diseases by activating inherently possessed functions, for cultured fishes and **shellfishes** and livestock with tendency of decreased immune function due to densely populated breeding environment, and for humans with tendency of easily lowered immune functions due to complicated social structures and aging. The present invention expresses marked effect in preventing infection and cancer by administering appropriate dose of **swine plasma**,

swine plasma albumin, peptides isolated from **swine plasma** and **swine plasma albumin**, and **swine plasma** mixture, among others including fine powder of **Crustacea** (including crust of **Crustacea**), to activate immune function of **Crustacea**, Pisces, Aves, Mammals, and humans.

L17 ANSWER 3 OF 3 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
ACCESSION NUMBER: 2000-587582 [55] WPIDS
DOC. NO. CPI: C2000-175331
TITLE: Stimulating immune system of aquatic animals comprises administering supplement comprising animal plasma.
DERWENT CLASS: B04 C03
INVENTOR(S): **TAKAHASHI, Y**
PATENT ASSIGNEE(S): (AMPR-N) AMERICAN PROTEIN CORP
COUNTRY COUNT: 90
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000056166	A1	20000928	(200055)*	EN	20

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000037689	A	20001009	(200103)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000056166	A1	WO 2000-US7611	20000322
AU 2000037689	A	AU 2000-37689	20000322

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000037689	A	Based on	WO 2000056166

PRIORITY APPLN. INFO: US 1999-125700P 19990323
AN 2000-587582 [55] WPIDS
AB WO 200056166 A UPAB: 20001102
NOVELTY - The immune system of aquatic animals is stimulated by administering a supplement comprising animal plasma.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) production of the supplement which comprises separating the plasma from the whole blood of animals, concentrating the plasma and drying the obtained concentrated product and

(2) a plasma feed product comprising aquatic animal feed and animal plasma.

ACTIVITY - Immunostimulant.

USE - Used for preventing disease, particularly white patch or whit spot disease in aquatic animals, particularly **shrimps** and grouper.

4% Appetein (granular animal plasma) was fed as a supplement to the diet of **shrimps** infected with white spot disease virus. Results showed that **shrimps** fed no supplement experienced complete mortality after 10 days whereas 11/15 **shrimps** fed with the supplement survived.

ADVANTAGE - The survivability of animals is increased when challenged with diseases, including those caused by the white spot baculo virus. The method does not rely on the use of diagnostic techniques, including hybridization tests, in situ hybridization tests and PCR amplification tests and does not require the use of antibiotics or other medications. The method is easy and economical and prevents future outbreaks of disease.

Dwg.0/5

FILE 'HOME' ENTERED AT 11:43:02 ON 22 NOV 2005

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=> d his ful

     (FILE 'HOME' ENTERED AT 11:29:38 ON 22 NOV 2005)
               SET COST OFF

     FILE 'REGISTRY' ENTERED AT 11:29:44 ON 22 NOV 2005
               E AP 920/CN 5
L1           1 SEA ABB=ON  PLU=ON  "AP 920"/CN
               E AP920/CN 5
               E "PORICNE PLASMA ALBUMIN"/CN 5
               E "PORICNE PLASMA"/CN 5
               E "SWINE PLASMA ALBUMIN"/CN 5
               E "SWINE PLASMA"/CN 5
               E "ALBUMIN, PORCINE"/CN 5
               E "ALBUMIN, SWINE"/CN 5

     FILE 'HCAPLUS' ENTERED AT 11:31:04 ON 22 NOV 2005
L*** DEL  11267 S (PORCINE OR SWINE OR PIG OR HOG)(S)(PLASMA OR BLOOD MEAL
L2        11268 SEA ABB=ON  PLU=ON  (PORCINE OR SWINE OR PIG OR HOG)(S)(PLA
               SMA OR BLOOD MEAL OR ALBUMIN) OR L1 OR AP920 OR AP 920
L3           15 SEA ABB=ON  PLU=ON  L2 AND (CRUSTACEA? OR PRAWN OR LOBSTER
               OR CRAB OR SHRIMP OR OSTRACOD? OR SHELLFISH OR SHELL FISH
               OR HOMARIDAE OR HOMARUS OR NEPHROPIDAE OR BRACHYURA OR
               PAGURUS OR ANOMURA OR DECAPODA OR PENAEUS)
               D KWIC
L4           15 SEA ABB=ON  PLU=ON  (L2 OR (SBM OR PBM)(S)BLOOD MEAL) AND
               (CRUSTACEA? OR PRAWN OR LOBSTER OR CRAB OR SHRIMP OR
               OSTRACOD? OR SHELLFISH OR SHELL FISH OR HOMARIDAE OR
               HOMARUS OR NEPHROPIDAE OR BRACHYURA OR PAGURUS OR ANOMURA
               OR DECAPODA OR PENAEUS)

     FILE 'REGISTRY' ENTERED AT 11:34:38 ON 22 NOV 2005

     FILE 'HCAPLUS' ENTERED AT 11:34:38 ON 22 NOV 2005
               D QUE L4
               D L4 1-15 .BEVSTR

     FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, JICST-EPLUS, JAPIO,
     PHIC, PHIN, TOXCENTER, CANCERLIT, VETU, VETB, CABA, AGRICOLA, PASCAL,
     DISSABS, FEDRIP' ENTERED AT 11:34:40 ON 22 NOV 2005
L5           40 SEA ABB=ON  PLU=ON  L4
L6           35 DUP REM L5 (5 DUPLICATES REMOVED)
               D 1-35 IBIB ABS

     FILE 'MEDLINE' ENTERED AT 11:36:36 ON 22 NOV 2005
L*** DEL      5 S (CRUSTACEA AND (IMMUNITY OR ALBUMIN))/CT
L7            8 SEA ABB=ON  PLU=ON  (CRUSTACEA AND (IMMUNITY OR ALBUMINS))/
               CT
               D QUE
               D 1-8 .BEVERLYMED

     FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, JICST-EPLUS,
     JAPIO, PHIC, PHIN, TOXCENTER, CANCERLIT, VETU, VETB, CABA, AGRICOLA,
     PASCAL, DISSABS, FEDRIP' ENTERED AT 11:38:05 ON 22 NOV 2005
L8         24797 SEA ABB=ON  PLU=ON  ("HATTORI T"? OR "TSUNEO H"?)/AU
L9         65101 SEA ABB=ON  PLU=ON  ("TAKAHASHI Y"? OR "YUKINORI T"?)/AU
L10         1302 SEA ABB=ON  PLU=ON  ("TACHIKAWA Y"? OR "YOSHIHIRO T"?)/AU
L11            4 SEA ABB=ON  PLU=ON  L8 AND L9 AND L10
L12           77 SEA ABB=ON  PLU=ON  L8 AND (L9 OR L10)
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L13           4 SEA ABB=ON  PLU=ON  L9 AND L10
L14          37 SEA ABB=ON  PLU=ON  (L12 OR L8 OR L9 OR L10) AND (L2 OR
               SBM OR PBM)
L15           5 SEA ABB=ON  PLU=ON  (L12 OR L8 OR L9 OR L10) AND L4
L16           5 SEA ABB=ON  PLU=ON  L11 OR L13 OR L15
L17           3 DUP REM L16 (2 DUPLICATES REMOVED)
                D 1-3 IBIB ABS

     FILE 'HOME' ENTERED AT 11:43:02 ON 22 NOV 2005


     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   21 NOV 2005  HIGHEST RN 868586-21-4
     DICTIONARY FILE UPDATES:  21 NOV 2005  HIGHEST RN 868586-21-4

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

       Please note that search-term pricing does apply when
       conducting SmartSELECT searches.

     ************************************************************
     *                                                          *
     * The CA roles and document type information have been removed from *
     * the IDE default display format and the ED field has been added,   *
     * effective March 20, 2005.  A new display format, IDERL, is now    *
     * available and contains the CA role and document type information. *
     *                                                          *
     ************************************************************

     Structure search iteration limits have been increased.  See HELP SLIMI
     for details.

     REGISTRY includes numerically searchable data for experimental and
     predicted properties as well as tags indicating availability of
     experimental property data in the original document.  For information
     on property searching in REGISTRY, refer to:

     http://www.cas.org/ONLINE/UG/regprops.html

     FILE HCAPLUS

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     FILE COVERS 1907 - 22 Nov 2005  VOL 143 ISS 22

                   Searcher    :     Shears     571-272-2528
```

FILE LAST UPDATED: 21 Nov 2005 (20051121/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE MEDLINE
FILE LAST UPDATED: 16 NOV 2005 (20051116/UP). FILE COVERS 1950 TO DA

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 16 November 2005 (20051116/ED)

FILE EMBASE
FILE COVERS 1974 TO 17 Nov 2005 (20051117/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE WPIDS
FILE LAST UPDATED: 17 NOV 2005 <20051117/UP>
MOST RECENT DERWENT UPDATE: 200574 <200574/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://thomsonderwent.com/coverage/latestupdates/ <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER GUIDES, PLEASE VISIT:
http://thomsonderwent.com/support/userguides/ <<<

>>> NEW! FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT

DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
FIRST VIEW - FILE WPIFV.
FOR FURTHER DETAILS: http://www.thomsonderwent.com/dwpifv <<<

>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501.
PLEASE CHECK:
http://thomsonderwent.com/support/dwpiref/reftools/classification/code
FOR DETAILS. <<<

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html <

FILE CONFSCI
FILE COVERS 1973 TO 25 May 2005 (20050525/ED)

FILE JICST-EPLUS
FILE COVERS 1985 TO 21 NOV 2005 (20051121/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED
TERM (/CT) THESAURUS RELOAD.

FILE JAPIO
FILE LAST UPDATED: 4 NOV 2005 <20051104/UP>
FILE COVERS APR 1973 TO JULY 28, 2005

<<< GRAPHIC IMAGES AVAILABLE >>>

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html <

FILE PHIC
FILE COVERS CURRENT RECORDS AND IS UPDATED DAILY
FILE LAST UPDATED: 21 NOV 2005 (20051121/ED)

FILE PHIN
FILE COVERS 1980 TO 18 NOV 2005 (20051118/ED)

FILE TOXCENTER

FILE COVERS 1907 TO 22 Nov 2005 (20051122/ED)

This file contains CAS Registry Numbers for easy and accurate substanc
identification.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TOXCENTER has been enhanced with new files segments and search fields.
See HELP CONTENT for more information.

TOXCENTER thesauri in the /CN, /CT, and /MN fields incorporate the
MeSH 2005 vocabulary. See http://www.nlm.nih.gov/mesh/ and
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html for a
description of changes.

FILE CANCERLIT
FILE COVERS 1963 TO 15 Nov 2002 (20021115/ED)

Searcher : Shears 571-272-2528

On July 28, 2002, CANCERLIT was reloaded. See HELP RLOAD for details

CANCERLIT thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

This file contains CAS Registry Numbers for easy and accurate substan identification.

FILE VETU
FILE LAST UPDATED: 02 JAN 2002 <20020102/UP>
FILE COVERS 1983-2001

FILE VETB
FILE LAST UPDATED: 25 SEP 94 <940925/UP>
FILE COVERS 1968-1982

FILE CABA
FILE COVERS 1973 TO 3 Nov 2005 (20051103/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

The CABA file was reloaded 7 December 2003. Enter HELP RLOAD for deta

FILE AGRICOLA

FILE COVERS 1970 TO 4 Nov 2005 (20051104/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE PASCAL
FILE LAST UPDATED: 21 NOV 2005 <20051121/UP>
FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE IN THE BASIC INDEX (/BI) FIELD <<<

FILE DISSABS
FILE COVERS 1861 TO 26 OCT 2005 (20051026/ED)

FILE FEDRIP

FILE COVERS CURRENT DATA. LAST UPDATE: 8 NOV 2005 (20051108/ED)

Searcher : Shears 571-272-2528

Searcher : Shears 571-272-2528

Devi, S.
10/699810

21nov05 14:58:20 User219783 Session D2128.2

SYSTEM:OS - DIALOG OneSearch
File 65:Inside Conferences 1993-2005/Nov W3
(c) 2005 BLDSC all rts. reserv.
File 440:Current Contents Search(R) 1990-2005/Nov 21
(c) 2005 Inst for Sci Info
File 348:EUROPEAN PATENTS 1978-2005/Nov W01
(c) 2005 European Patent Office
File 357:Derwent Biotech Res. _1982-2005/Nov W3
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File 113:European R&D Database 1997
(c)1997 Reed-Elsevier(UK)Ltd All rts reserv
*File 113: This file is closed (no updates)

Set Items Description
--- ----- -----

-key terms

Set Items Description
S9 7749 (PORCINE OR SWINE OR PIG OR HOG)(S)(PLASMA OR ALBUMIN OR B-LOOD(W)MEAL) OR (SBM? ? OR PBM? ?)(10N)(BLOOD(W)MEAL) OR AP920 OR AP(W)920
S10 51 S9 AND (CRUSTACEA? OR PRAWN? ? OR LOBSTER? ? OR CRAB? ? OR SHRIMP OR OSTRACOD? OR SHELLFISH? OR SHELL(W)FISH? OR HOMARIDAE OR HOMARUS OR NEPHROPIDAE OR BRACHYURA OR PAGURUS OR ANOMURA OR DECAPODA OR PENAEUS)
S11 16 S10 AND (POWDER? OR CRUST??)
S12 14 RD (unique items)
>>>No matching display code(s) found in file(s): 65, 113

12/3,AB/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01939361
A method of analgesia
Methode zur Schmerzbekampfung
Methode d'analgesie
PATENT ASSIGNEE:
Wex Medical Limited, (4055211), Unit A, 34/F, Manulife Tower, 169 Electric Road, North Point, Hong Kong, (CN), (Applicant designated States: all)
INVENTOR:
Dong, Qingbin. Suite 1006 Beijing Huapu Int Blg, No 19 Chaoyang Men Wai Street, P.R.China100020, (CN)
Shum, Frank Haykong Unit A,34/F, Manulife Tower., 169 Electric Road, North Point, Hong Kong. China, (CN)
LEGAL REPRESENTATIVE:
VOSSIUS & PARTNER (100314), Siebertstrasse 4, 81675 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1563839 A1 050817 (Basic)
APPLICATION (CC, No, Date): EP 2004022073 010911;
PRIORITY (CC, No, Date): CN 124517 000918
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK
RELATED PARENT NUMBER(S) - PN (AN):
EP 1320369 (EP 2001982091)
INTERNATIONAL PATENT CLASS: A61K-031/519; A61K-031/517; A61P-023/02; A61P-025/04

Searcher : Shears 571-272-2528

ABSTRACT EP 1563839 A1

The present invention relates to the use of sodium channel blocking compounds such as tetrodotoxin, saxitoxin as well as anolgs and derivatives thereof for the preparation of a pharmaceutical composition for systemic administration for producing analgesia in a mammal experiencing pain.

ABSTRACT WORD COUNT: 42

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200533	414
SPEC A	(English)	200533	14941
Total word count - document A			15355
Total word count - document B			0
Total word count - documents A + B			15355

12/3,AB/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01065495
An estrogen binding proteinaceous substance, its possible role in estrogen action, and potential use.
Ostrogenbindungproteinverbindung, ihre mogliche Rolle in Ostrogenwirkung und potentielle Verwendung
Une substance proteinique liant les oestrogenes, son role possible dans l'action des oestrogenes et son utilisation potentielle
PATENT ASSIGNEE:
Rao, Ramanath B., (2462280), Oldenaller 36, 1081 HK Amsterdam, (NL), (Applicant designated States: all)
INVENTOR:
Rao, Ramanath B., Oldenaller 36, 1081 HK Amsterdam, (NL)
LEGAL REPRESENTATIVE:
Smulders, Theodorus A.H.J., Ir. et al (21191), Vereenigde Octrooibureaux Nieuwe Parklaan 97, 2587 BN 's-Gravenhage, (NL)
PATENT (CC, No, Kind, Date): EP 939084 A1 990901 (Basic)
APPLICATION (CC, No, Date): EP 98200423 980211;
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C07K-014/47

ABSTRACT EP 939084 A1

The invention relates to an estrogen binding proteinaceous substance. The substance is different from the classical cytosol or nuclear ER (type I and II) in a number of characteristics. The novel estrogen binding substances according to the invention will be collectively referred to as estrogen binding protein (EBP).

The invention provides a murine estrogen binding proteinaceous substance or a mammalian equivalent thereof, the murine substance comprising a subunit having a molecular weight of about 61-67 kD as analyzed by SDS-PAGE.

In its active form this proteinaceous substance usually appears as a heterodimer, whereby one subunit of the murine substance is the 61-67 kD proteinaceous substance and the other subunit is a 17-22kD proteinaceous substance, whereby the resulting heterodimer has a molecular weight of

about 81-84 kD as measured by gel electrophoresis.
The genes encoding EBP and antibodies directed against EBP are also part of the invention.
ABSTRACT WORD COUNT: 147
NOTE:
Figure number on first page: NONE
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9935	201
SPEC A	(English)	9935	21878
Total word count - document A			22079
Total word count - document B			0
Total word count - documents A + B			22079

12/3,AB/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00927473
A composition for administration to animals containing a tocopheryl phosphate
Tocopheryl-Phosphat enthaltende Zusammensetzung zur Verabreichung an Tiere
Composition destinee a etre administree aux animaux et contenant un phosphate de tocopherol
PATENT ASSIGNEE:
SHOWA DENKO KABUSHIKI KAISHA, (293040), 13-9, Shiba Daimon 1-chome, Minato-ku, Tokyo, (JP), (applicant designated states: AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Ito, Shinobu, c/o Showa Denko K.K., 13-9, Shiba Daimon 1-chome, Minato-ku, Tokyo, 105, (JP)
Ogata, Eiji, c/o Showa Denko K.K., 13-9, Shiba Daimon 1-chome, Minato-ku, Tokyo, 105, (JP)
LEGAL REPRESENTATIVE:
Strehl Schubel-Hopf & Partner (100941), Maximilianstrasse 54, 80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 845216 A1 980603 (Basic)
APPLICATION (CC, No, Date): EP 97120865 971127;
PRIORITY (CC, No, Date): JP 96332931 961127
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: A23K-001/16

ABSTRACT EP 845216 A1
A vitamin E source composition for administration to animals, which comprises a tocopheryl phosphate, a salt thereof or a composition containing a tocopheryl phosphate or a salt thereof. Also, disclosed is a method of supplying vitamin E to animals which comprises administering to animals the above vitamin E source composition. The tocopheryl phosphoric acid and a salt thereof can be formed into a composition and also can contain an antioxidant or the like.
ABSTRACT WORD COUNT: 74

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9823	319

SPEC A	(English)	9823	7507
Total word count - document A			7826
Total word count - document B			0
Total word count - documents A + B			7826

12/3;AB/4 (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00854928
Kininogen for promoting bone formation and inhibiting bone resorption
Kininogen zur Stimulierung der Knochenbildung und Verhinderung der Knochenresorption
Kininogen pour la stimulation de la formation osseuse et l'inhibition de la resorption osseuse
PATENT ASSIGNEE:
SNOW BRAND MILK PRODUCTS CO., LTD., (487915), 1-1, Naebo-cho 6-chome, Higashi-ku, Sapporo-shi, Hokkaido 065, (JP), (Proprietor designated states: all)
INVENTOR:
Yamamura, Junichi, 29-8-205, Renjaku-cho, Kawagoe-shi, Saitama, (JP)
Takada, Yukihiro, 62-22, Kozutsumi, Kawagoe-shi, Saitama, (JP)
Goto, Masaaki, 456-1, Shimokoyama, Ishibashimachi, Shimotsuga-gun, Tochigi, (JP)
Aoe, Seiichiro, 8-9-406, Shinsayama 2-chome, Sayama-shi, Saitama, (JP)
LEGAL REPRESENTATIVE:
Boeters, Hans Dietrich, Dr. et al (2193), Patentanwalte Boeters & Bauer, Bereiteranger 15, 81541 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 787499 A1 970806 (Basic)
EP 787499 B1 020918
APPLICATION (CC, No, Date): EP 97101445 970130;
PRIORITY (CC, No, Date): JP 9645566 960208
DESIGNATED STATES: DE; FR; NL
INTERNATIONAL PATENT CLASS: A61K-038/57; A61K-038/01; A23L-001/305; A23K-001/16; A61P-019/08

ABSTRACT EP 787499 A1
The present invention will provide an agent promoting bone formation and inhibiting bone resorption comprising kininogen and degradation product of kininogen as an effective ingredient. Fragment 1(center dot)2 is a preferable degradation product of kininogen.
Further, the present invention will provide a drink, food, medicine and feed combined with kininogen and degradation product of kininogen.
ABSTRACT WORD COUNT: 56

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199708W1	134
CLAIMS B	(English)	200238	140
CLAIMS B	(German)	200238	135
CLAIMS B	(French)	200238	154
SPEC A	(English)	199708W1	2836
SPEC B	(English)	200238	2966
Total word count - document A			2971
Total word count - document B			3395
Total word count - documents A + B			6366

12/3,AB/5 (Item 5 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00802632
Processed fish meat and process for producing said fish meat
Verarbeitetes Fischfleisch und Verfahren zur Herstellung dieses verarbeiteten Fischfleisches
Chair de poisson transformee et procede de production de cette chair de poisson transformee
PATENT ASSIGNEE:
Kabushiki Kaisha Katayama, (2203040), 1-8, Inokuma 10-chome, Mizumaki-machi, Onga-gun, Fukuoka-ken 807, (JP), (Proprietor designated states: all)
INVENTOR:
KATAYAMA, Hiroshi, 4-12, Takasuhigashi 4-chome, Wakamatsu-ku, Kitakyushu-shi, Fukuoka-ken 808-01, (JP)
KATAYAMA, Taro, 4-12, Takashuhigashi 4-chome, Wakamatsu-ku, Kitakyushu-shi, Fukuoka-ken 808-01, (JP)
LEGAL REPRESENTATIVE:
Bagger-Soerensen, Birgitte et al (60662), Internationalt Patent-Bureau, 23, Hoje Taastrup Boulevard, 2630 Taastrup, (DK)
PATENT (CC, No, Kind, Date): EP 813821 A1 971229 (Basic)
EP 813821 A1 980422
EP 813821 B1 040526
WO 1996027300 960912
APPLICATION (CC, No, Date): EP 96904282 960229; WO 96JP477 960229
PRIORITY (CC, No, Date): JP 9574613 950306
DESIGNATED STATES: DE; DK; FR; GB
INTERNATIONAL PATENT CLASS: A23L-001/325; A23L-001/33; A23L-001/333; A23B-004/02; A23B-004/08

ABSTRACT EP 813821 A1
A processed fish meat which has a strong thermal binding property and an elasticity, can be freely processed, scarcely suffers from deterioration or outflow of low-molecular-weight nutrients (drips, etc.), and has a high nutritive value with the use of these nutrients in a high yield. The processed fish meat comprises, per 100 parts by weight of a round or chunk of fish meat or fish meat pieces, from 0.2 to 4 parts by weight (on a dry basis) of salts added in the form of a 1.5 to 7 mol solution in water or drips and from 0.1 to 2.7 parts by weight (on a dry basis) of alkaline agents added in the form of a 0.3 to 3 mol solution in water or drips.
ABSTRACT WORD COUNT: 126

LANGUAGE (Publication,Procedural,Application): English; English; Japanese
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199712W3	1455
CLAIMS B	(English)	200422	904
CLAIMS B	(German)	200422	709
CLAIMS B	(French)	200422	966
SPEC A	(English)	199712W3	21964
SPEC B	(English)	200422	16986
Total word count - document A			23422
Total word count - document B			19565
Total word count - documents A + B			42987

12/3,AB/6 (Item 6 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00798791
Application of phospholipases in animal feed
Verwendung von Phospholipasen in Tierfutter
Utilisation de phospholipases dans l'alimentation animale
PATENT ASSIGNEE:
DSM IP Assets B.V., (4438030), Het Overloon 1, 6411 TE Heerlen, (NL),
(Proprietor designated states: all)
INVENTOR:
Beudeker, Robert Franciscus, Boomkwekerij 31, 2635 KC Den Hoorn, (NL)
Kies, Arie Karst, Freule van Dorthsingel 57, 2642 AC Pijnacker, (NL)
LEGAL REPRESENTATIVE:
Schwander, Kuno Josef et al (92436), DSM Nutritional Products Wurmisweg 576, 4303 Kaiseraugst, (CH)
PATENT (CC, No, Kind, Date): EP 743017 A2 961120 (Basic)
EP 743017 A3 970326
EP 743017 B1 040929
EP 743017 B1 040929
APPLICATION (CC, No, Date): EP 96201318 960515;
PRIORITY (CC, No, Date): EP 95201266 950515; EP 95202442 950908
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: A23K-001/165

ABSTRACT EP 743017 A2
The present invention discloses a process for improving the efficiency of feed utilization and/or for promoting the growth of animals in which an animal is fed a diet which comprises a composition comprising feed substance and a ready for use phospholipase additive. Preferably said composition also comprises at least one phospholipid. Said compositions are used to improve fat digestibility and to promote growth of the animal. The phospholipid is preferably lecithin and the preferred phospholipase is a mammalian phospholipase A2. In a preferred embodiment the phospholipase is produced using recombinant DNA technology to express the enzyme in a suitable host such as a microorganism or a transgenic plant.
ABSTRACT WORD COUNT: 124

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	508
CLAIMS B	(English)	200440	504
CLAIMS B	(German)	200440	495
CLAIMS B	(French)	200440	572
SPEC A	(English)	EPAB96	4597
SPEC B	(English)	200440	4738
Total word count - document A			5107
Total word count - document B			6309
Total word count - documents A + B			11416

12/3,AB/7 (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00761154
CCK ANTIBODIES USED TO IMPROVE FEED EFFICIENCY
CCK-ANTIKORPER ZUR VERBESSERUNG DER FUTTERVERWERTUNG
ANTICORPS CONTRE LA CCK (CHOLEOCYSTOKININE) UTILISES POUR OBTENIR UNE MEILLEURE EFFICACITE DES ALIMENTS
PATENT ASSIGNEE:
WISCONSIN ALUMNI RESEARCH FOUNDATION, (319660), 614 North Walnut Street, Madison, WI 53705, (US), (Proprietor designated states: all)
INVENTOR:
COOK, Mark E., 313 S. Segoe Road, Madison, WI 53705, (US)
MILLER, Cheryl C., 2610 McKenna Boulevard, Madison, WI 53711, (US)
PIMENTEL, Julio L., 3206 Windgate Drive, Buford, GA 30519, (US)
LEGAL REPRESENTATIVE:
Ellis-Jones, Patrick George Armine (30442), J.A. KEMP & CO. 14 South Square Gray's Inn, London WC1R 5JJ, (GB)
PATENT (CC, No, Kind, Date): EP 769964 A2 970502 (Basic)
EP 769964 B1 030502
WO 96004933 960222
APPLICATION (CC, No, Date): EP 95926766 950721; WO 95US9227 950721
PRIORITY (CC, No, Date): US 286376 940805
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
RELATED DIVISIONAL NUMBER(S) - PN (AN):
EP 1149590 (EP 2001110992)
INTERNATIONAL PATENT CLASS: A61K-039/395; A23K-001/00; A61P-003/04
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200318	600
CLAIMS B	(German)	200318	628
CLAIMS B	(French)	200318	678
SPEC B	(English)	200318	3767
Total word count - document A			0
Total word count - document B			5673
Total word count - documents A + B			5673

12/3,AB/8 (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00593132
Device and method of assaying whole blood for hdl cholesterol
Vorrichtung und Verfahren zur Analyse von HDL-Cholesterin in Vollblut
Dispositif et procede pour l'analyse du HDL cholesterol dans le sang entier
PATENT ASSIGNEE:
Bayer Corporation, (923419), 100 Bayer Road, Pittsburgh, PA 15205-9741, (US), (applicant designated states:
AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;PT;SE)
INVENTOR:
Kozak, Mary Beth, 10324 Beatrice Street, Osceola, Indiana 46561, (US)
Badke, Andrea, 18271 C.R.2, Bristol, Indiana 46507, (US)
LEGAL REPRESENTATIVE:
Danner, Klaus, Dr. et al (51864), Bayer AG Konzernbereich RP Rechtspolitik Gewerblicher Rechtsschutz, 51368 Leverkusen, (DE)
PATENT (CC, No, Kind, Date): EP 597268 A1 940518 (Basic)

EP 597268 B1 990506
APPLICATION (CC, No, Date): EP 93116548 931013;
PRIORITY (CC, No, Date): US 959400 921013
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; PT; SE
INTERNATIONAL PATENT CLASS: G01N-033/92; G01N-033/483; G01N-033/52;

ABSTRACT EP 597268 A1
An improved device and method of a) separating the cellular components of whole blood from plasma or serum, b) separating the low density lipoprotein (LDL) fraction and the very low density lipoprotein (VLDL) fraction from the plasma or serum, then c) assaying the plasma or serum for cholesterol present in the high density lipoprotein (HDL) fraction are disclosed. The device includes a separation area that separates the cellular components of whole blood from the serum or plasma and separates the LDL and VLDL fractions from the serum or plasma, and a test area that assays the serum or plasma for the concentration of the HDL cholesterol. The method includes introducing a whole blood sample to a test device including a separation area comprising a first zone that separates the cellular components of the whole blood from the plasma or serum; and a second zone that separates the LDL and the VLDL fractions from the plasma or serum. The essentially cell-free, LDL-free and VLDL-free plasma or serum then migrates to a test area. After the plasma or serum migrates to the test area, plasma or serum is assayed for HDL cholesterol and the test area is examined for a quantitative response to HDL cholesterol present in the whole blood sample. (see image in original document)
ABSTRACT WORD COUNT: 216
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9918	554
CLAIMS B	(German)	9918	528
CLAIMS B	(French)	9918	618
SPEC B	(English)	9918	16870
Total word count - document A			0
Total word count - document B			18570
Total word count - documents A + B			18570

12/3,AB/9 (Item 9 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00526854
Device and method of separating and assaying whole blood
Vorrichtung und Verfahren zur Auftrennung und Analyse von Vollblut
Dispositif et procede pour la separation et l'analyse du sang entier
PATENT ASSIGNEE:
Bayer Corporation, (923415), One Mellon Center 500 Grant Street, Pittsburgh, PA 15219-2502, (US), (applicant designated states: DE;FR;GB;IT)
INVENTOR:
Chu, Amy H., 50930 Woodstream Court, Granger, Indiana 46530, (US)
Stover, Lon R., 50903 Country Road 7N, Elkhart, Indiana 46514, (US)
LEGAL REPRESENTATIVE:
Danner, Klaus, Dr. et al (51864), Bayer AG Konzernbereich RP Patente und Lizenzen, 51368 Leverkusen, (DE)
PATENT (CC, No, Kind, Date): EP 535485 A1 930407 (Basic)
EP 535485 B1 970716

APPLICATION (CC, No, Date): EP 92116090 920921;
PRIORITY (CC, No, Date): US 770467 911003
DESIGNATED STATES: DE; FR; GB; IT
INTERNATIONAL PATENT CLASS: G01N-033/52;
ABSTRACT EP 535485 A1

An improved device and method of separating the cellular components of whole blood from plasma or serum and assaying the plasma or serum for a predetermined soluble constituent are disclosed. The device includes a filter pad, that separates the cellular components of whole blood from the serum or plasma, and a test pad, that assays the serum or plasma for a predetermined soluble constituent. The filter pad effectively separates and retains cellular components of the whole blood sample, thereby eliminating assay interference by the cellular components of whole blood. The method includes contacting the whole blood with a test device including a filter pad comprising a suitable carrier matrix homogeneously incorporating therein a separating reagent composition comprising a) separating reagent, like an agglutinin, such as a blood type nonspecific lectin; a coagulant, such as a thrombin or a thrombin-like compound; or a mixture thereof, and b) a nonhemolytic surfactant, like an ethoxylated or propoxylated nonionic or anionic surfactant, such that the cellular components of the whole blood are separated from the plasma or serum as the blood permeates through the filter pad, The essentially cell-free plasma or serum then saturates a test pad that is in contact with the filter pad. After the plasma or serum saturates the test pad, the test pad is examined for a qualitative or quantitative response to a predetermined soluble constituent of the whole blood.

ABSTRACT WORD COUNT: 232

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1201
CLAIMS B	(English)	EPAB97	1190
CLAIMS B	(German)	EPAB97	1128
CLAIMS B	(French)	EPAB97	1394
SPEC A	(English)	EPABF1	17412
SPEC B	(English)	EPAB97	17310
Total word count - document A			18615
Total word count - document B			21022
Total word count - documents A + B			39637

12/3,AB/10 (Item 10 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00479555
High integrity natural nitrogenous granules for agriculture.
Naturliche Stickstoff enthaltende Granulate mit hoher mechanischer Bestandigkeit fur die Landwirtschaft.
Granules de compose azote naturel de haute resistance mecanique pour l'agriculture.
PATENT ASSIGNEE:
HARMONY PRODUCTS, INC, (1256360), 2121 Old Greenbrier Road, Chesapeake, Virginia 23320, (US), (applicant designated states: DE;ES;FR;GB;IT)
INVENTOR:
Moore, William Percy, 408 Woodland Road, P.O.Box 1270,Hopewell Virginia 23860, (US)
LEGAL REPRESENTATIVE:

Gallafent, Richard John (30821), GALLAFENT & CO. 8 Staple Inn, London WCIV 7QH., (GB)
PATENT (CC, No, Kind, Date): EP 440339 A1 910807 (Basic)
APPLICATION (CC, No, Date): EP 91300165 910110;
PRIORITY (CC, No, Date): US 463254 900110
DESIGNATED STATES: DE; ES; FR; GB; IT
INTERNATIONAL PATENT CLASS: C05F-001/00; C05F-011/00; A23K-001/00; B01J-002/16;

ABSTRACT EP 440339 A1
A method of preparing high integrity natural nitrogenous granules for agriculture by heating natural nitrogenous materials under alkaline conditions until the materials develop adhesive properties, forming the materials into granules by mechanical means, and heating the natural nitrogenous granules until they harden; and the compositions formed by this method. The granules for agriculture include natural fertilizers, secondary nutrients, micronutrients, and natural animal feed protein supplements. The method also provides natural based plant food and animal feed supplement granules containing natural or synthetic additive substances which are useful in agriculture. The natural materials used in the method include poultry waste, poultry feather meal, hair meal, seafood meal, blood meal, bone meal, soybean meal, food waste, and grain by-products. The method provides natural nitrogenous granules which are free of disagreeable odor by admixing reactive aldehyde compounds with the natural nitrogenous materials prior to granule formation.
ABSTRACT WORD COUNT: 145

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	2017
SPEC A	(English)	EPABF1	6378
Total word count - document A			8395
Total word count - document B			0
Total word count - documents A + B			8395

12/3,AB/11 (Item 11 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00427030
Device and method of separating and assaying whole blood.
Vorrichtung und Verfahren zur Auftrennung und Analyse von Vollblut.
Dispositif et procede pour la separation et l'analyse du sang entier.
PATENT ASSIGNEE:
MILES INC., (923410), 1127 Myrtle Street, Elkhart Indiana 46514, (US), (applicant designated states: DE;FR;GB;IT)
INVENTOR:
Barkes, Brian R., 50830 Lincroft Lane, Granger, Indiana 46530, (US)
Clements, Helen M., 52690 C.R. 21, Bristol, Indiana 46507, (US)
Magers, Thomas A., 63251 Mulberry Road, South Bend, Indiana 46614, (US)
Means, Margaret F., 1010 S 26th Street, South Bend, Indiana 46615, (US)
Skjold, A. Christopher, 1602 Victoria Drive, Elkhart, Indiana 46514, (US)
LEGAL REPRESENTATIVE:
Danner, Klaus, Dr. et al (51861), c/o Bayer AG Konzernverwaltung RP Patentabteilung, W-5090 Leverkusen 1 Bayerwerk, (DE)
PATENT (CC, No, Kind, Date): EP 436897 A2 910717 (Basic)
EP 436897 A3 920311

APPLICATION (CC, No, Date): EP 90124871 901220;
PRIORITY (CC, No, Date): US 468172 900112
DESIGNATED STATES: DE; FR; GB; IT
INTERNATIONAL PATENT CLASS: G01N-033/52; G01N-033/70; G01N-033/72; G01N-033/92; C12Q-001/60

ABSTRACT EP 436897 A2
A device and method of separating the cellular components of whole blood from plasma or serum and assaying the plasma or serum for a soluble constituent. The device includes a filter pad, that separates the cellular components of whole blood from the serum or plasma, in releasable contact with a test pad, that assays the serum or plasma for a particular soluble constituent. The filter pad, contaminated with the cellular components, is detachable from the plasma or serum-saturated test pad, thereby eliminating assay interference by the cellular components of whole blood. The method includes contacting the whole blood with a test device including a filter pad comprising a suitable carrier matrix optionally incorporating a lectin, a thrombin, or a mixture thereof, such that the cellular components of the whole blood are separated from the plasma or serum as the blood permeates through the filter pad. The essentially cell-free plasma or serum then saturates a test pad that is in releasable contact with the filter pad. After the plasma or serum saturates the test pad, the filter pad is detached from the test pad, and the exposed test pad is examined for a qualitative or quantitative response to a particular soluble constituent of the whole blood. (see image in original document)
ABSTRACT WORD COUNT: 212

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1118
SPEC A	(English)	EPABF1	15026
Total word count - document A			16144
Total word count - document B			0
Total word count - documents A + B			16144

12/3,AB/12 (Item 12 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00292553
Process and device for separating and testing whole blood.
Verfahren und Vorrichtung zum Trennen und Testen von Vollblut.
Procede et dispositif de separation et de test de sang total.
PATENT ASSIGNEE:
MILES INC., (923410), 1127 Myrtle Street, Elkhart Indiana 46514, (US),
(applicant designated states: DE;FR;GB)
INVENTOR:
Genshaw, Marvin A., 2905 Neff Street, Elkhart, IN, (US)
Stover, Lon R., 50903 County Road 7 N, Elkhart, IN, (US)
LEGAL REPRESENTATIVE:
Danner, Klaus, Dr. et al (51861), c/o Bayer AG Konzernverwaltung RP Patentabteilung, W-5090 Leverkusen 1 Bayerwerk, (DE)
PATENT (CC, No, Kind, Date): EP 295526 A1 881221 (Basic)
EP 295526 B1 920422
APPLICATION (CC, No, Date): EP 88109015 880606;
PRIORITY (CC, No, Date): US 63680 870619

DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G01N-033/52; C12Q-001/56; G01N-033/70; G01N-033/72
ABSTRACT EP 295526 A1

A process and device for separating plasma or serum from whole blood. The device includes one or more bibulous matrices, treated to separate the serum or plasma from the cellular components of whole blood. In one embodiment of the invention, the separated, undiluted soluble constituents (plasma or serum) from the whole blood sample can then can be analyzed for a particular soluble constituent. The process includes depositing the whole blood on a treated bibulous matrix containing a nonblood specific lectin, a thrombin or mixture thereof, whereby the cellular components are separated from the whole blood as it permeates through the bibulous matrix. The essentially cell-free plasma or serum then passes to an assay area of the same, or an adjacent, bibulous matrix for detection of a particular soluble constituent of whole blood.

ABSTRACT WORD COUNT: 136

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	954
CLAIMS B	(German)	EPBBF1	716
CLAIMS B	(French)	EPBBF1	861
SPEC B	(English)	EPBBF1	7618
Total word count - document A			0
Total word count - document B			10149
Total word count - documents A + B			10149

12/3,AB/13 (Item 13 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00180760
Shaped chitin body.
Geformte Gegenstande aus Chitin.
Objet moule a partir de chitine.
PATENT ASSIGNEE:
UNITIKA LTD., (292320), No. 50, Higashihonmachi 1-chome, Amagasaki-shi Hyogo, (JP), (applicant designated states: DE;FR;GB)
INVENTOR:
Motosugi, Kenzo, No. 16, Biwa Uji, Uji-shi Kyoto, (JP)
Kifune, Koji, No. 64-3-4, Sujaku 1-chome, Nara-shi Nara, (JP)
Yamaguchi, Yasuhiko, No. 21-3, Uenoyama-cho Daigo, Fushimi-ku Kyoto-shi Kyoto, (JP)
Nobe, Yasuo, No. 59-16 Obiraki, Hirono-cho Uji-shi Kyoto, (JP)
Tanae, Hiroyuki, No. 669, Kakimoto-cho Gojosagaru Inokumadori, Shimogyo-ku Kyoto-shi Kyoto, (JP)
LEGAL REPRESENTATIVE:
Pearce, Anthony Richmond et al (34741), MARKS & CLERK Alpha Tower Suffolk Street, Queensway Birmingham B1 1TT, (GB)
PATENT (CC, No, Kind, Date): EP 171254 A2 860212 (Basic)
EP 171254 A3 870204
EP 171254 B1 910619
APPLICATION (CC, No, Date): EP 85305416 850730;
PRIORITY (CC, No, Date): JP 84164016 840803; JP 84173944 840821
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: C08L-005/08; D01F-002/00; A61L-015/00;

ABSTRACT EP 171254 A2
Shaped chitin body.
A shaped chitin body prepared by treating a shaped body of chitin with an alkali solution, such that within a dilute aqueous solution of acetic acid, the volume of said shaped chitin body will increase by a factor of at least about 10 while substantially retaining its shape. This shaped chitin body has versatile capabilities comparable to those of chitosan. A non-woven fabric made of a fibrous chitin body is particularly effective as a wound dressing.
ABSTRACT WORD COUNT: 81

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	508
CLAIMS B	(German)	EPBBF1	394
CLAIMS B	(French)	EPBBF1	509
SPEC B	(English)	EPBBF1	4979
Total word count - document A			0
Total word count - document B			6390
Total word count - documents A + B			6390

12/3,AB/14 (Item 14 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00178477
Fluorometric assay of IgG4.
Fluoreszenztest fur IgG4.
Dosage fluorimetrique d'IgG4.
PATENT ASSIGNEE:
BioWhittaker, Inc., (1484651), 8830 Biggs Ford Road, Walkersville, Maryland 21793-0127, (US), (applicant designated states: DE)
INVENTOR:
Halpern, George M., 9 Hillbrook Drive, Portola Valley, CA 94025, (US)
Scott, John, R., 521 Del Medio, no. 103, Mountain View, CA 94043, (US)
Yuh-Geng, Tsay, 1933 Cape Horn Drive, San Jose, CA 95133, (US)
Sun, Jane V., 13005 La Cresta Drive, Los Altos Hills, CA 94022, (US)
LEGAL REPRESENTATIVE:
Armitage, Ian Michael et al (27761), MEWBURN ELLIS & CO. 2/3 Cursitor Street, London EC4A 1BQ, (GB)
PATENT (CC, No, Kind, Date): EP 161868 A2 851121 (Basic)
EP 161868 A3 880107
EP 161868 B1 921104
APPLICATION (CC, No, Date): EP 85303100 850501;
PRIORITY (CC, No, Date): US 609267 840511
DESIGNATED STATES (Pub A): AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE; (Pub B): DE
INTERNATIONAL PATENT CLASS: G01N-033/53; G01N-033/543; G01N-033/545;

ABSTRACT EP 161868 A2
Fluorometric assay of IgG4.
A method for identifying and quantifying allergen specific IgG(sub 4) levels in patient serum by conjugating the IgG(sub 4) in the serum with allergens adhering to an insoluble support, conjugating the serum IgG(sub 4) with an enzyme labeled anti-IgG(sub 4) antibody, contacting the enzyme label with a solution of a substrate which will yield a fluorescent

product in the presence of the enzyme, and measuring the level of fluorescence in the solution. Special reagents and their manufacture are also disclosed.
ABSTRACT WORD COUNT: 86

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	390
CLAIMS B	(German)	EPBBF1	385
CLAIMS B	(French)	EPBBF1	427
SPEC B	(English)	EPBBF1	6978

Total word count - document A 0
Total word count - document B 8180
Total word count - documents A + B 8180

Set	Items	Description
S13	21	S10/TI,DE,MAJ
S14	19	S13 NOT S11
S15	3	RD (unique items)

>>>No matching display code(s) found in file(s): 65, 113

15/3,AB/1 (Item 1 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

17952677 Document Delivery Available: 000189213400001 References: 69
TITLE: Molecular cloning and characterization of tiger **shrimp** (**Penaeus** monodon) transglutaminase
AUTHOR(S): Huang CC; Sritunyalucksana K; Soderhall K; Song YL (REPRINT)
AUTHOR(S) E-MAIL: song@ccms.ntu.edu.tw
CORPORATE SOURCE: Natl Taiwan Univ, Inst Zool, /Taipei 106//Taiwan/ (REPRINT); Natl Taiwan Univ, Inst Zool, /Taipei 106//Taiwan/; Mahidol Univ, Ctr Excellence Shrimp Mol Biol & Biotechnol, /Bangkok 10250//Thailand/; Univ Uppsala, Dept Comparat Physiol, /S-75105 Uppsala//Sweden/; Natl Taiwan Univ, Dept Life Sci, /Taipei 106//Taiwan/
PUBLICATION TYPE: JOURNAL
PUBLICATION: DEVELOPMENTAL AND COMPARATIVE IMMUNOLOGY, 2004, V28, N4 (APR), P279-294
GENUINE ARTICLE#: 777ZD
PUBLISHER: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND
ISSN: 0145-305X
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: Transglutaminases (TG) are important for blood coagulation and post-translation remodeling of proteins. Using a plaque screening assay, we isolated cDNA encoding a novel TG from a shrimp (Penaeus monodon) hemocyte cDNA library. The TG cDNA consists of 2988 bp with an open reading frame of 2271 bp. The deduced protein has 757 amino acid residues, a calculated molecular mass of 84,713 Da and an isoelectric point of 5.56. Neither a typical hydrophobic leader sequence nor a transmembrane domain could be identified from the deduced sequence. Thus, shrimp TG may be a typical cytoplasmic protein. The sequence of shrimp TG was similar to crayfish, other invertebrate and vertebrate TG sequences. Enzyme activity was detected in all organs tested. This is consistent with the widespread, low-level expression of TG mRNA. However, high levels of TG expression were detected in hematopoietic tissue. TG signals were stronger in mitotic cells, indicating that cell proliferation and TG synthesis are associated.

Preliminary data showed that recombinant TG existed the enzyme activity but lacked coagulation activity.

15/3,AB/2 (Item 2 from file: 440)
DIALOG(R)File 440:Current Contents Search(R)

10587730 References: 27
TITLE: Purification and characterization of the clotting protein from the white **shrimp Penaeus** vannamei
AUTHOR(S): Montano-Perez K; Yepiz-Plascencia G; Higuera-Ciapara I; Vargas-Albores F (REPRINT)
AUTHOR(S) E-MAIL: fvargas@cascabel.ciad.mx
CORPORATE SOURCE: CIAD, Marine Biotechnol, POB 1735/Hermosillo 83000/Sonora/Mexico/ (REPRINT); CIAD, Marine Biotechnol, /Hermosillo 83000/Sonora/Mexico/
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GENUINE ARTICLE#: 199NU
PUBLISHER: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND
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ABSTRACT: The protein responsible for clot formation was isolated from plasma of the white shrimp Penaeus vannamei by affinity chromatography in a heparin-agarose column. The protein, named clotting protein (CP), was found to be a lipoglycoprotein, composed of two 210-kDa subunits covalently bound by disulfide bridges. CP formed large polymers when incubated with hemocyte lysate. Dansylcadaverine can be incorporated into CP by a hemocyte lysate or guinea pig transglutaminase mediated reaction. The amino acid composition and the amino terminal sequence were determined and compared with the clotting protein of the crayfish and the spiny lobster. (C) 1999 Elsevier Science Inc. All rights reserved.

15/3,AB/3 (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.

0359518 DBR Accession Number: 2005-05222 PATENT
Use of a single-cell protein material for preparing a pharmaceutical or nutritional cardio-protective composition for treating or preventing e.g. atherosclerosis, coronary heart disease, stenosis or thrombosis in an animal - SCP preparation by continuous fermentation for pharmaceutical or nutritional composition manufacture
AUTHOR: BERGE R; KLEPPE G
PATENT ASSIGNEE: THIA MEDICA AS; NORFERM DA 2005
PATENT NUMBER: WO 200502606 PATENT DATE: 20050113 WPI ACCESSION NO.: 2005-081876 (200509)
PRIORITY APPLIC. NO.: NO 20033082 APPLIC. DATE: 20030704
NATIONAL APPLIC. NO.: WO 2004NO204 APPLIC. DATE: 20040702
LANGUAGE: English
ABSTRACT: DERWENT ABSTRACT: NOVELTY - A single-cell protein material is useful for preparing a pharmaceutical or nutritional cardio protective composition for treating or preventing atherosclerosis, coronary heart disease, stenosis, thrombosis, myocardial infarction, stroke,

hypercholesterolemia or fatty liver in an animal. BIOTECHNOLOGY - Preferred Protein: The single-cell protein material after fermentation is subjected to centrifugation in an industrial continuous centrifuge, preferably at 3000 rpm, followed by ultrafiltration using membranes having an exclusion size of preferable 100000 Daltons. The single-cell protein material further is subjected to a sterilization step, preferable in a heat exchanger, and a homogenization step. The single-cell protein material is dried by spray drying. Prior to spray drying, the material is held in a storage tank at a temperature of less than 20degreesC and a pH of less than about 6.5. The single-cell protein material is a microbial culture comprising methanotrophic bacteria. The microbial culture further comprises one or more species of heterotrophic bacteria. The microbial culture comprises a combination of microbial culture comprising Methylococcus capsulatus, Ralstonia sp., Brevibacillus agri or Aneurinibacillus sp. Methylococcus capsulatus is the main or sole ingredient of the SPC material. The single-cell culture is produced by continuous fermentation, preferably operated with 2-3% biomass (on a dry weight basis). The single-cell material is derived from fermentation on hydrocarbon fractions or on natural gas. The composition is a food grade product or additive, e.g. an animal feed or pet food. The single-cell protein material is useful for preparing a pharmaceutical or nutritional cardio protective composition for lowering the concentration of homocysteine in the plasma, for changing the fatty acyl pattern or for improving lipid homeostasis. The animal is a human, an agricultural animal, such as gallinaceous birds, bovine, ovine, caprine or porcine mammals, domestic or pet animal, such as dog or cat, or a fish or shellfish, such as salmon, cod, Tilapia, clams, oysters, lobster or crabs. ACTIVITY - Cardiant; Antiarteriosclerotic; Thrombolytic. No biological data given. MECHANISM OF ACTION - Gene therapy. USE - The single-cell protein material is useful for preparing a pharmaceutical or nutritional cardio protective composition for lowering the concentration of homocysteine in the plasma, for changing the fatty acyl pattern or for improving lipid homeostasis. The single-cell protein material is useful for preparing a pharmaceutical or nutritional cardio protective composition for treating or preventing atherosclerosis, coronary heart disease, stenosis, thrombosis, myocardial infarction, stroke, hypercholesterolemia or fatty liver in an animal. (All claimed.) (34 pages)

Authors

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Set     Items   Description
S16      4685   AU=(HATTORI, T? OR HATTORI T? OR TSUNEO, H? OR TSUNEO H?)
S17     10442   AU=(TAKAHASHI, Y? OR TAKAHASHI Y? OR YUKINORI, T? OR YUKIN-
             ORI T?)
S18       216   AU=(TACHIKAWA, Y? OR TACHIKAWA Y? OR YOSHIHIRO, T? OR YOSH-
             IHIRO T?)
S19         0   S16 AND S17 AND S18
S20       148   S16 AND (S17 OR S18)
S21         1   S17 AND S18
S22         0   (S16 OR S17 OR S18 OR S20) AND S10
S23         1   S21 NOT (S11 OR S14)
>>>No matching display code(s) found in file(s): 65, 113

? t 23/19/1
>>>Format 19 is not valid in file 65
>>>Format 19 is not valid in file 348
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23/19/1 (Item 1 from file: 440)
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PUBLISHER: JAPAN INST METALS, 1-14-32 ICHIBANCHO AOBA-KU, SENDAI, 980-8544, JAPAN
ISSN: 1345-9678
JOURNAL SUBJECT: MATERIALS SCIENCE & ENGINEERING;

CONTENTS:

P. 1422-1428. A second-variational prediction operator for fast convergence in self-consistent electronic-structure calculations. Sawamura A; Kohyama M. Sumitomo Elect Ind Ltd, /Seika 6190237//Japan/ (REPRINT); Sumitomo Elect Ind Ltd, /Seika 6190237//Japan/; Natl Inst Adv Ind Sci & Technol, /Ikeda/Osaka 5638577/Japan/. English. ARTICLE. 68 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900006
Section Heading: CLUSTERS AND NANOSTRUCTURES

P. 1429-1432. Growth and magic Behavior of metal encapsulated silicon clusters. Kawamura H; Kumar V; Kawazoe Y. Tohoku Univ, IMR, /Sendai/Miyagi 9808577/Japan/ (REPRINT); Tohoku Univ, IMR, /Sendai/Miyagi 9808577/Japan/; Dr Vijay Kumar Fdn, /Madras 600078/Tamil Nadu/India/. English. ARTICLE. 17 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900007

P. 1433-1436. First-principles study on electron conduction property of monatomic sodium nanowire. Egami Y; Sasaki T; Tsukamoto S; Ono T; Inagaki K; Hirose K. Osaka Univ, Dept Precis Sci & Technol, /Suita/Osaka 5650871/Japan/ (REPRINT); Osaka Univ, Dept Precis Sci & Technol, /Suita/Osaka 5650871/Japan/; NIMS, /Tsukuba/Ibaraki 3050047/Japan/; Osaka Univ, Res Ctr Ultra Precis Sci & Technol, /Suita/Osaka 5650871/Japan/. English. ARTICLE. 30 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900008

P. 1437-1441. Study on cap closure mechanism of single-walled carbon nanotubes by molecular dynamics. Han SS; Lee HM. Korea Adv Inst Sci & Technol, Dept Mat Sci & Engn, Kusung Dong 373-1/Taejon 305701//South Korea/ (REPRINT); Korea Adv Inst Sci & Technol, Dept Mat Sci & Engn, /Taejon 305701//South Korea/. English. ARTICLE. 25 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900009

P. 1442-1449. Nanomechanical behavior of beta-SiC nanowire in tension: Molecular dynamics simulations. Kim TY; Han SS; Lee HM. Korea Adv Inst Sci & Technol, Dept Mat Sci & Engn, Kusung Dong 373-1/Taejon 305701//South Korea/ (REPRINT); Korea Adv Inst Sci & Technol, Dept Mat Sci & Engn, /Taejon 305701//South Korea/. English. ARTICLE. 30 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900010

Section Heading: DEFECTS AND INTERFACES

P. 1450-1451. Stability of copper atoms embedded in sodium-chloride crystals. Furuya M; Ishii S; **Takahashi Y**; Nagasaka SI; Yoshinari T; Kawazoe Y; Ohno K. Yokohama Natl Univ, Grad Sch Engn, /Yokohama/Kanagawa 2408501/Japan/ (REPRINT); Yokohama Natl Univ, Grad Sch Engn, /Yokohama/Kanagawa 2408501/Japan/; Tohoku Univ, Mat Res Inst, /Sendai/Miyagi 9808577/Japan/; Yamagata Univ, Fac Sci, /Yamagata 9908560//Japan/. English. ARTICLE. 5 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900011

P. 1452-1454. Ab initio study of hydrogen storage in hydrogen hydrate clathrates. Sluiter MHF; Adachi H; Belosludov RV; Belosludov VR; Kawazoe Y. Tohoku Univ, Mat Res Inst, /Sendai/Miyagi 9808577/Japan/ (REPRINT); Tohoku Univ, Mat Res Inst, /Sendai/Miyagi

9808577/Japan/; Tohoku Univ, Ctr NE Asia Studies, /Sendai/Miyagi 9808577/Japan/; RAS, Inst Inorgan Chem, /Novosibirsk//Russia/. English. ARTICLE. 6 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900012

P. 1455-1460. The effects of solute and vacancy depletion on the formation of precipitation-free zone in a model binary alloy examined by a Monte Carlo simulation. Okuda H; Ochiai S. Kyoto Univ, Int Innovat Ctr, /Kyoto 6068501//Japan/ (REPRINT); Kyoto Univ, Int Innovat Ctr, /Kyoto 6068501//Japan/. English. ARTICLE. 15 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900013

P. 1461-1464. First-principles study of a {122} Sigma=9 boundary in cubic SiC: relative stability between zigzag and straight models and comparison with electron Microscopy observation. Kohyama M; Tanaka K; Tanaka S. Natl Inst Adv Ind Sci & Technol, Special Div Green Life Technol, /Ikeda/Osaka 5638577/Japan/ (REPRINT); Natl Inst Adv Ind Sci & Technol, Special Div Green Life Technol, /Ikeda/Osaka 5638577/Japan/. English. ARTICLE. 21 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900014

Section Heading: STRUCTURAL AND MECHANICAL PROPERTIES

P. 1465-1468. Lattice anomaly of MgB(h-BN) under anisotropic compression. Kobayashi K; Arai M. Natl Inst Mat Sci, Computat Mat Sci Ctr, /Tsukuba/Ibaraki 3050044/Japan/ (REPRINT); Natl Inst Mat Sci, Computat Mat Sci Ctr, /Tsukuba/Ibaraki 3050044/Japan/. English. ARTICLE. 17 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900015

P. 1469-1472. Ab initio modeling of the stress-strain response of SiAlON (Si6-zAlzOzN8-z, z=0. 5 and 1). Kocer C; Hirosaki N; Ogata S. Natl Inst Mat Sci, Adv Mat Lab, /Tsukuba/Ibaraki 3050044/Japan/ (REPRINT); Natl Inst Mat Sci, Adv Mat Lab, /Tsukuba/Ibaraki 3050044/Japan/; Univ Sydney, Sch Phys, /Sydney/NSW 2006/Australia/; Osaka Univ, Grad Sch, /Suita/Osaka 5650871/Japan/; Osaka Univ, Grad Sch, /Suita/Osaka 5650871/Japan/. English. ARTICLE. 39 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900016

Section Heading: PHASE STABILITY AND PHASE TRANSITION

P. 1473-1477. Vibrational contribution on nucleation free energy of Cu precipitates in Fe-Cu system. Yuge K; Seko A; Kobayashi K; Tatsuoka T; Nishitani SR; Adachi H. Kyoto Univ, Dept Mat Sci & Engn, /Kyoto 6068501//Japan/ (REPRINT); Kyoto Univ, Dept Mat Sci & Engn, /Kyoto 6068501//Japan/. English. ARTICLE. 25 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900017

P. 1478-1484. First-principles calculation of L1(0)-disorder phase boundary in Fe-Pd system. Mohri T; Chen Y. Hokkaido Univ, Grad Sch Engn, /Sapporo/Hokkaido 0608628/Japan/ (REPRINT); Hokkaido Univ, Grad Sch Engn, /Sapporo/Hokkaido 0608628/Japan/; Univ Tokyo, Grad Sch Engn, /Tokyo 1138656//Japan/. English. ARTICLE. 29 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900018

P. 1485-1488. Instability of the B2 ordered structure in TiNi shape

memory alloys due to atom displacements on (110) planes. Nakata Y. Iwaki Meisei Univ, Coll Sci & Engn, /Iwaki/Fukushima 9708551/Japan/ (REPRINT); Iwaki Meisei Univ, Coll Sci & Engn, /Iwaki/Fukushima 9708551/Japan/. English. ARTICLE. 13 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900019

P. 1489-1498. Phase separation of the B2 structure accompanied by an ordering in Co-Al and Ni-Al binary systems. Ohtani H; Chen Y; Hasebe M. Kyushu Inst Technol, Dept Mat Sci & Engn, /Kitakyushu/Fukuoka 8048550/Japan/ (REPRINT); Kyushu Inst Technol, Dept Mat Sci & Engn, /Kitakyushu/Fukuoka 8048550/Japan/; Univ Tokyo, Sch Engn, /Tokyo 1138656//Japan/. English. ARTICLE. 43 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900020

P. 1499-1506. Effect of the order-disorder transition of the bcc structure on the solubility of be in the Fe-Be binary system. Ohtani H; Takeshita Y; Hasebe M. Kyushu Inst Technol, Dept Mat Sci & Engn, /Kitakyushu/Fukuoka 8048550/Japan/ (REPRINT); Kyushu Inst Technol, Dept Mat Sci & Engn, /Kitakyushu/Fukuoka 8048550/Japan/. English. ARTICLE. 31 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900021

P. 1507-1514. Thermodynamic analysis of the Ni-Si-Ti system using thermochemical properties determined from Ab initio calculations. Tokunaga T; Hashima K; Ohtani H; Hasebe M. Fukuoka Ind Technol Ctr, /Kitakyushu/Fukuoka 8070831/Japan/ (REPRINT); Fukuoka Ind Technol Ctr, /Kitakyushu/Fukuoka 8070831/Japan/; Kyushu Inst Technol, Dept Mat Sci & Engn, /Kitakyushu/Fukuoka 8048550/Japan/. English. ARTICLE. 44 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900022

Section Heading: CRYSTAL GROWTH AND LIQUIDS

P. 1515-1521. Numerical study on LiCaAlF6 Czochralski crystal growth. Zeng Z; Chen JQ; Mizuseki H; Sato H; Shimamura K; Ichinoseki K; Fukuda T; Kawazoe Y. Chongqing Univ, Dept Mech Engn, /Chongqing 630044//Peoples R China/ (REPRINT); Chongqing Univ, Dept Mech Engn, /Chongqing 630044//Peoples R China/; Tohoku Univ, Mat Res Inst, /Sendai/Miyagi 9808577/Japan/; Tohoku Univ, Inst Multidisciplinary Adv Mat Res, /Sendai/Miyagi 9808577/Japan/; NEC TOKIN Corp, /Tsukuba/Ibaraki 3050875/Japan/; Waseda Univ, /Tokyo 1690051//Japan/. English. ARTICLE. 28 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900023

P. 1522-1527. Oscillatory thermocapillary convection in liquid bridge under microgravity. Zeng Z; Mizuseki H; Chen JQ; Ichinoseki K; Kawazoe Y. Chongqing Univ, Dept Mech Engn, /Chongqing 400044//Peoples R China/ (REPRINT); Chongqing Univ, Dept Mech Engn, /Chongqing 400044//Peoples R China/; Tohoku Univ, Mat Res Inst, /Sendai/Miyagi 9808577/Japan/. English. ARTICLE. 24 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900024

P. 1528-1534. Dendritic morphogenesis by means of a fractal. Agop M; Ioannou P; Luchian D; Nica P; Radu C. Univ Athens, Dept Phys, /GR-15771 Athens//Greece/ (REPRINT); Univ Athens, Dept Phys, /GR-15771 Athens//Greece/; Tech Gh Asachi Univ, Dept Phys, /Iasi 6600//Romania/. English. ARTICLE. 19 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900025

Section Heading: MATERIALS DESIGN

P. 1535-1538. The prediction on initial discharge capacity of AB(5)-based alloy with simulated annealing. Yang L; Feng W. Beijing Inst Technol, Sch Chem Engn & Environm, /Beijing 100081//Peoples R China/ (REPRINT); Beijing Inst Technol, Sch Chem Engn & Environm, /Beijing 100081//Peoples R China/; Natl Dev Ctr Hi Tech Green Mat, /Beijing 100081//Peoples R China/. English. ARTICLE. 8 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900026

Section Heading: RECENT RESEARCH AND DEVELOPMENTS IN TITANIUM AND ITS ALLOYS

P. 1539-1539. Special issue on recent research and developments in titanium and its alloys - Preface. Niinomi M; Ikeda M; Hanawa T; Okazaki Y. Toyohashi Univ Technol, Dept Prod Syst Engn, 1-1 Hibarigaoka/Toyohashi/Aichi 4418580/Japan/ (REPRINT); Toyohashi Univ Technol, Dept Prod Syst Engn, /Toyohashi/Aichi 4418580/Japan/; Kansai Univ, Dept Mat Sci & Engn, /Suita/Osaka 5648680/Japan/; Natl Inst Mat Sci, Ctr Biomat, /Tsukuba/Ibaraki 3050047/Japan/; Agcy Ind Sci & Technol, Dept Mat Sci & Bioengn, /Tsukuba/Ibaraki 3058564/Japan/. English. EDITORIAL MATERIAL. 0 REFERENCES. Document Delivery no: 000221863900027

Section Heading: Mechanical Properties-(1) Alloys for Biomedical, Dental and Health CARE APPLICATIONS

P. 1540-1548. Fatigue, fretting fatigue and corrosion characteristics of biocompatible beta type titanium alloy conducted with various thereto-mechanical treatments. Akahori T; Niinomi M; Fukui H; Suzuki A. Toyohashi Univ Technol, Dept Prod Syst Engn, /Toyohashi/Aichi 4418580/Japan/ (REPRINT); Toyohashi Univ Technol, Dept Prod Syst Engn, /Toyohashi/Aichi 4418580/Japan/; Aichi Gakuin Univ, Dept Dent Mat Sci, /Nagoya/Aichi 4648650/Japan/; Daido Steel Co Ltd, Titanium Div, /Tokyo 1058403//Japan/. English. ARTICLE. 18 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900028

P. 1549-1554. Dynamic Young's modulus and mechanical properties of Ti-Hf alloys. Zhou YL; Niinomi M; Akahori T. Toyohashi Univ Technol, Dept Prod Syst Engn, /Toyohashi/Aichi 4418580/Japan/ (REPRINT); Toyohashi Univ Technol, Dept Prod Syst Engn, /Toyohashi/Aichi 4418580/Japan/. English. ARTICLE. 26 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900029

P. 1555-1560. Effect of composition on microstructure and compressive mechanical properties in Ti-Cu-Fe-Sn-Nb alloys. He G; Hagiwara M. Natl Inst Mat Sci, /Tsukuba/Ibaraki 3050047/Japan/ (REPRINT); Natl Inst Mat Sci, /Tsukuba/Ibaraki 3050047/Japan/. English. ARTICLE. 17 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900030

P. 1561-1565. Microscopic feature of fractured implant in practical dental use. Era H; Mastushita Y; Miura M; Kishitake K. Kyushu Inst Technol, Dept Mat Sci, /Kitakyushu/Fukuoka 8048550/Japan/ (REPRINT); Kyushu Inst Technol, Dept Mat Sci, /Kitakyushu/Fukuoka 8048550/Japan/; Kyushu Univ, Fac Dent Sci, /Fukuoka 8158582//Japan/. English. ARTICLE. 12 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900031

P. 1566-1570. The effect of cooling rate from solution treatment temperature on phase constitution and tensile properties of Ti-4.3Fe-7.1Cr-3.0Al alloy. Ikeda M; Komatsu SY; Ueda M; Suzuki A. Kansai Univ, Dept Mat Sci & Engn, /Suita/Osaka 5648680/Japan/ (REPRINT); Kansai Univ, Dept Mat Sci & Engn, /Suita/Osaka 5648680/Japan/; Daido Steel Co Ltd, /Tokyo 1058403//Japan/. English. ARTICLE. 10 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900032

Section Heading: (2) Alloys for General Applications

P. 1571-1576. Tensile behavior and cold workability of Ti-Mo alloys. Takemoto Y; Shimizu I; Sakakibara A; Hida M; Mantani Y. Okayama Univ, Dept Mech Engn, /Okayama 7008530//Japan/ (REPRINT); Okayama Univ, Dept Mech Engn, /Okayama 7008530//Japan/; Kanagawa Univ, Dept Mech Engn, /Yokohama/Kanagawa 2218686/Japan/. English. ARTICLE. 15 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900033

P. 1577-1585. Effect of aging on fatigue-crack growth behavior of a high-temperature titanium alloy. Liu JR; Li SX; Li D; Yang R. Chinese Acad Sci, Titanium Alloy Lab, 72 Wenhua Rd/Shenyang 110016//Peoples R China/ (REPRINT); Chinese Acad Sci, Titanium Alloy Lab, /Shenyang 110016//Peoples R China/; Chinese Acad Sci, Shenyang Natl Lab Mat Sci, /Shenyang 110016//Peoples R China/. English. ARTICLE. 37 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900034

P. 1586-1593. Fretting fatigue characteristics with relating contact pressure and surface roughness of highly workable titanium alloy, Ti-4.5Al-3V-2Mo-2Fe. Takeda J; Niinomi M; Akahori T; Gunawarman. Toyohashi Univ Technol, Dept Prod Syst Engn, /Toyohashi/Aichi 4418580/Japan/ (REPRINT); Toyohashi Univ Technol, Dept Prod Syst Engn, /Toyohashi/Aichi 4418580/Japan/. English. ARTICLE. 12 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900035

Section Heading: Physical Properties

P. 1594-1600. Hydrogen-assisted degradation of titanium based alloys. Tal-Gutelmacher E; Eliezer D. Ben Gurion Univ Negev, Dept Mat Engn, /IL-84105 Beer Sheva//Israel/ (REPRINT); Ben Gurion Univ Negev, Dept Mat Engn, /IL-84105 Beer Sheva//Israel/. English. ARTICLE. 55 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900036

Section Heading: Surface Modification

P. 1601-1606. Formation of diamond-like carbon based double-layer film on Ti-6Al-4V substrate by ionization deposition. Mano T; Sugiyama O; Shibuya Y; Nakayama H; Takai O. Fuji Ind Res Inst Shizuoka Prefecture, /Fuji/Shizuoka 4178550/Japan/ (REPRINT); Fuji Ind Res Inst Shizuoka Prefecture, /Fuji/Shizuoka 4178550/Japan/; Nagoya Univ, Ctr Integrated Res Sci & Engn, /Nagoya/Aichi 4648603/Japan/. English. ARTICLE. 24 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900037

P. 1607-1612. One-pot process for anodic oxide films of titanium with high photocatalytic activity. Iwasaki M; Iwasaki Y; Tada H; Ito

S. Kinki Univ, Dept Appl Chem, /Osaka 5778502//Japan/ (REPRINT); Kinki Univ, Dept Appl Chem, /Osaka 5778502//Japan/; Kinki Univ, Interdisciplinary Grad Sch Sci & Engn, /Osaka 5778502//Japan/; Kinki Univ, Mol Engn Inst, /Osaka 5778502//Japan/. English. ARTICLE. 14 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900038

P. 1613-1619. Surface modification of titanium using laser beam. Nishio K; Yamaguchi T; Era H; Katoh M. Kyushu Inst Technol, Dept Biol Funct & Engn, /Kitakyushu/Fukuoka 8048550/Japan/ (REPRINT); Kyushu Inst Technol, Dept Biol Funct & Engn, /Kitakyushu/Fukuoka 8048550/Japan/; Kyushu Inst Technol, Dept Appl Sci Integrated Syst Engn, /Kitakyushu/Fukuoka 8048550/Japan/; Kyushu Inst Technol, Dept Mat Sci, /Kitakyushu/Fukuoka 8048550/Japan/. English. ARTICLE. 10 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900039

P. 1620-1623. Ti-Al, graded Al/AlTi, and Ti-Al-N coatings prepared by Supersonic Free-Jet PVD. Yumoto A; Yamamoto T; Hiroki F; Shiota I; Niwa N. Kogakuin Univ, Dept Mech Syst Engn, /Tokyo 1638677//Japan/ (REPRINT); Kogakuin Univ, Dept Mech Syst Engn, /Tokyo 1638677//Japan/; Univ Tokyo, Dept Adv Mat Sci, /Tokyo 1138656//Japan/; Kogakuin Univ, Dept Mat Sci & Technol, /Tokyo 1920015//Japan/. English. ARTICLE. 32 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900040

Section Heading: Phase Transformation

P. 1624-1628. Decomposition processes of beta phase in a Ti-15Zr-4Nb-4Ta alloy. Kobayashi S; Matsuzaki A; Nakai K; Okazaki Y. Ehime Univ, Dept Mat Sci & Engn, /Matsuyama/Ehime 7908577/Japan/ (REPRINT); Ehime Univ, Dept Mat Sci & Engn, /Matsuyama/Ehime 7908577/Japan/; Natl Inst AIST, AIST Tsukuba E, /Tsukuba/Ibaraki 3058564/Japan/. English. ARTICLE. 32 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900041

P. 1629-1634. Phase transformation of alpha '' martensite structure by aging in Ti-8 mass%Mo alloy. Mantani Y; Takemoto Y; Hida M; Sakakibara A; Tajima M. Kanagawa Univ, Dept Mech Engn, /Yokohama/Kanagawa 2218686/Japan/ (REPRINT); Kanagawa Univ, Dept Mech Engn, /Yokohama/Kanagawa 2218686/Japan/; Okayama Univ, Dept Mech Engn, /Okayama 7008530//Japan/. English. ARTICLE. 11 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900042

Section Heading: Corrosion

P. 1635-1639. Effects of biological factors on the repassivation current of titanium. Hanawa T; Kohayama Y; Hiromoto S; Yamamoto A. Natl Inst Mat Sci, Biomat Ctr, /Tsukuba/Ibaraki 3050044/Japan/ (REPRINT); Natl Inst Mat Sci, Biomat Ctr, /Tsukuba/Ibaraki 3050044/Japan/; Univ Tsukuba, Grad Sch Pure & Appl Sci, /Tsukuba/Ibaraki 3058577/Japan/. English. ARTICLE. 19 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900043

Section Heading: Composite

P. 1640-1645. Self-division behavier of TiB particles in TiB/Ti composite. **Yoshihiro T**; Tsuchiyama T; Takaki S. Kyushu

Univ, Dept Mat Sci & Engn, /Fukuoka 8128581//Japan/. English. ARTICLE. 13 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900044

P. 1646-1652. Shape recovery force of TiNi fiber reinforced composite by electric heating. Yamashita K; Shimamoto A. Saitama Inst Technol, /Okabe/Saitama 3690293/Japan/ (REPRINT); Saitama Inst Technol, /Okabe/Saitama 3690293/Japan/. English. ARTICLE. 20 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900045

Section Heading: PROCESSING-(1) Dental Precision Casting

P. 1653-1659. Casting pressure in two types of titanium casting equipment. Watanabe K; Okabe T. Texas A&M Univ, Dept Biomath, 3302 Gaston Ave/Dallas//TX/75246 (REPRINT); Texas A&M Univ, Dept Biomath, /Dallas//TX/75246; Niigata Univ, Dept Oral Hlth Sci, /Niigata 9518514//Japan/. English. ARTICLE. 24 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900046

Section Heading: (2) Cost Reduction Smelting

P. 1660-1664. Fundamental aspects of calciothermic process to produce titanium. Ono K. Kyoto Univ, /Kyoto//Japan/ (REPRINT); Kyoto Univ, /Kyoto//Japan/. English. ARTICLE. 6 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900047

P. 1665-1671. Reduction of TiO2 in molten CaCl2 by Ca deposited during CaO electrolysis. Suzuki RO; Fukui S. Kyoto Univ, Dept Energy Sci & Technol, /Kyoto 6068501//Japan/ (REPRINT); Kyoto Univ, Dept Energy Sci & Technol, /Kyoto 6068501//Japan/. English. ARTICLE. 28 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900048

Section Heading: REGULAR ARTICLES-Materials Physics

P. 1672-1678. Effect of Ni addition on fatigue properties of bulk glassy Zr50Cu40Al10 alloys. Yokoyama Y; Fukaura K; Inoue A. Himeji Inst Technol, Fac Engn, /Himeji/Hyogo 6712201/Japan/ (REPRINT); Himeji Inst Technol, Fac Engn, /Himeji/Hyogo 6712201/Japan/; Tohoku Univ, Inst Mat Res, /Sendai/Miyagi 9808577/Japan/. English. ARTICLE. 22 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900049

P. 1679-1683. Stress-temperature relationship in compression mode in Cu-Al-Ni shape memory alloys. Picornell C; Pons J; Cesari E. Univ Illes Balears, Dept Fis, Cra Valldemossa Km 7-5/E-07122 Palma de Mallorca//Spain/ (REPRINT); Univ Illes Balears, Dept Fis, /E-07122 Palma de Mallorca//Spain/. English. ARTICLE. 19 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900050

P. 1684-1686. Photoluminescent properties of europium-activated Zn2SnO4 phosphors. Chen YC; Chang YH; Tsai BS. Natl Cheng Kung Univ, Dept Mat Sci & Engn, /Tainan 70101//Taiwan/ (REPRINT); Natl Cheng Kung Univ, Dept Mat Sci & Engn, /Tainan 70101//Taiwan/. English. ARTICLE. 17 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900051

Section Heading: Microstructure of Materials

P. 1687-1692. Influence of purity on the formation of cube texture in aluminum foils for electrolytic capacitors. Takata N; Ikeda K; Yoshida F; Nakashima H; Abe H. Kyushu Univ, Interdisciplinary Grad Sch Engn & Sci, /Fukuoka 8168580//Japan/ (REPRINT); Kyushu Univ, Interdisciplinary Grad Sch Engn & Sci, /Fukuoka 8168580//Japan/; Kyushu Univ, Fac Engn Sci, /Fukuoka 8168580//Japan/. English. ARTICLE. 20 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900052

P. 1693-1699. Oxidation resistance of TiAl improved by ion implantation of beta-former elements. Taniguchi S; Yoshihara M; Fujita K. Osaka Univ, Dept Mat Sci & Proc, 2-2 Yamadaoka/Suita/Osaka 5650871/Japan/ (REPRINT); Osaka Univ, Dept Mat Sci & Proc, /Suita/Osaka 5650871/Japan/; Yokohama Natl Univ, Dept Mech Engn & Mat Sci, /Yokohama/Kanagawa 2408501/Japan/; Ion Engn Res Inst Corp, Project Res Lab 3, /Hirakata/Osaka 5730128/Japan/. English. ARTICLE. 15 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900053

P. 1700-1705. Mechanical properties related to microstructural variation of 6061 Al alloy joints by friction stir welding. Lee WB; Yeon YM; Jung SB. Sungkyunkwan Univ, Dept Adv Mat Engn, 300 Cheoncheondong/Suwon 440746/Kyounggido/South Korea/ (REPRINT); Sungkyunkwan Univ, Dept Adv Mat Engn, /Suwon 440746/Kyounggido/South Korea/; Suwon Sci Coll, Dept Automated Syst, /Hwasung 445742/Kyounggido/South Korea/. English. ARTICLE. 29 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900054

Section Heading: Mechanics of Materials

P. 1706-1713. Tear toughness of permanent mold cast and DC cast A356 aluminum alloys. Kumai S; Tanaka T; Zhu H; Sato A. Tokyo Inst Technol, Dept Mat Sci & Engn, /Yokohama/Kanagawa 2268502/Japan/ (REPRINT); Tokyo Inst Technol, Dept Mat Sci & Engn, /Yokohama/Kanagawa 2268502/Japan/. English. ARTICLE. 12 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900055

P. 1714-1721. Tear toughness evaluation of a permanent mold cast A356 aluminum alloy using a small-size specimen. Zhu H; Kumai S; Tanaka T; Sato A. Tokyo Inst Technol, Dept Mat Sci & Engn, /Yokohama/Kanagawa 2268502/Japan/ (REPRINT); Tokyo Inst Technol, Dept Mat Sci & Engn, /Yokohama/Kanagawa 2268502/Japan/. English. ARTICLE. 9 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900056

P. 1722-1730. Rock fragmentation control in blasting. Cho SH; Kaneko K. Hokkaido Univ, Grad Sch Engn, /Sapporo/Hokkaido 0608628/Japan/ (REPRINT); Hokkaido Univ, Grad Sch Engn, /Sapporo/Hokkaido 0608628/Japan/. English. ARTICLE. 26 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900057

P. 1731-1737. Creep characteristic of NiAl-9Mo eutectic alloy. Ren WL; Guo JT; Li GS; Wu JS. Shanghai Jiao Tong Univ, Minist Educ, /Shanghai 200030//Peoples R China/ (REPRINT); Shanghai Jiao Tong Univ, Minist Educ, /Shanghai 200030//Peoples R China/; Chinese Acad Sci, Dept Superalloys, /New Delhi 110016//India/. English. ARTICLE. 33 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no:

000221863900058

P. 1738-1742. High-loading velocity tensile properties and fracture behavior of SiCp/AC4CH composite. Wang L; Kobayashi T; Liu CM; Masuda T. Toyohashi Univ Technol, Dept Prod Syst Engn, /Toyohashi/Aichi 4418580/Japan/ (REPRINT); Toyohashi Univ Technol, Dept Prod Syst Engn, /Toyohashi/Aichi 4418580/Japan/; Northeastern Univ, Inst Mat Res, /Shenyang 110004//Peoples R China/. English. ARTICLE. 15 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900059

P. 1743-1747. The damping capacity of AZ91 magnesium matrix composites reinforced with the coated carbon fiber fabric. Gu JH; Zhang XN; Gu MY. Shanghai Jiao Tong Univ, State Key Lab Met Matrix Composites, /Shanghai 200030//Peoples R China/ (REPRINT); Shanghai Jiao Tong Univ, State Key Lab Met Matrix Composites, /Shanghai 200030//Peoples R China/. English. ARTICLE. 19 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900060

Section Heading: Materials Chemistry

P. 1748-1753. Effect of temperature on equilibria in synthetic sulfuric acid leaching solution of zinc calcine. Lee MS; Lee KJ; Oh YJ. Mokpo Natl Univ, Dept Adv Mat Sci & Engn, /Choongnam 534729//South Korea/ (REPRINT); Mokpo Natl Univ, Dept Adv Mat Sci & Engn, /Choongnam 534729//South Korea/; Korea Inst Sci & Technol, Met Proc Res Ctr, /Seoul 130650//South Korea/. English. ARTICLE. 13 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900061

P. 1754-1763. Measurement of the density of binary Ni-X (X=Co, W, Ta, Al) alloys. Mukai K; Fang L; Li ZS; Xiao F. Kyushu Inst Technol, Dept Mat Sci & Engn, /Kitakyushu/Fukuoka 8048550/Japan/ (REPRINT); Kyushu Inst Technol, Dept Mat Sci & Engn, /Kitakyushu/Fukuoka 8048550/Japan/. English. ARTICLE. 8 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900062

P. 1764-1768. Prediction of the occurrence of swirling liquid jet. Iguchi M; Iguchi D; Yoshida J. Hokkaido Univ, Div Mat Sci & Engn, /Sapporo/Hokkaido 0608628/Japan/ (REPRINT); Hokkaido Univ, Div Mat Sci & Engn, /Sapporo/Hokkaido 0608628/Japan/; Japan Sci & Technol Agcy, /Sapporo/Hokkaido 0600819/Japan/. English. ARTICLE. 19 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900063

Section Heading: Materials Processing

P. 1769-1773. Thermal expansion behavior of SiCP/aluminum alloy composites fabricated by a low-pressure infiltration process. Mizumoto M; Tajima Y; Kagawa A. Nagasaki Univ, Dept Mat Sci & Engn, /Nagasaki 8528521//Japan/ (REPRINT); Nagasaki Univ, Dept Mat Sci & Engn, /Nagasaki 8528521//Japan/. English. ARTICLE. 16 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900064

P. 1774-1777. Mechanical alloying of Fe25Al75-xTix mixed powders. Ouyang YF; Zhou WZ; Zhong XP; Qin SH. Guangxi Univ, Dept Phys, /Nanning 530004//Peoples R China/ (REPRINT); Guangxi Univ, Dept Phys, /Nanning 530004//Peoples R China/. English. ARTICLE. 23

REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900065
Section Heading: Engineering Materials and Their Applications

P. 1778-1781. Evaluation of degradability of CaTiO3 thin films in simulated body fluids. Ohtsu N; Sato K; Saito K; Hanawa T; Asami K. Tohoku Univ, Mat Res Inst, /Sendai/Miyagi 9808577/Japan/ (REPRINT); Tohoku Univ, Mat Res Inst, /Sendai/Miyagi 9808577/Japan/; Natl Inst Mat Sci, /Tsukuba/Ibaraki 3050047/Japan/; Univ Tsukuba, Grad Sch Pure & Appl Sci, /Tsukuba/Ibaraki 3058577/Japan/. English. ARTICLE. 15 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900066

P. 1782-1787. Bone-like layer growth and adhesion of osteoblast-like cells on calcium-deficient hydroxyapatite synthesized at different pH. Yasuda HY; Fujita Y; Fujitani W; Umakoshi Y; Sakka Y; Tang FQ; Takaoka A; Matsuura N. Osaka Univ, Res Ctr Ultra High Voltage Electron Microscopy, /Ibaraki 5670047//Japan/ (REPRINT); Osaka Univ, Res Ctr Ultra High Voltage Electron Microscopy, /Ibaraki 5670047//Japan/; Osaka Univ, Dept Mat Sci & Engn, /Suita/Osaka 5650871/Japan/; Osaka Univ, Frontier Res Ctr, /Suita/Osaka 5650871/Japan/; Natl Inst Mat Sci, /Tsukuba/Ibaraki 3050047/Japan/; Osaka Univ, Dept Mol Pathol, /Suita/Osaka 5650871/Japan/. English. ARTICLE. 12 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900067

Section Heading: EXPRESS REGULAR ARTICLES

P. 1788-1793. Mechanism of vertical microcracking in CaO center dot SiO2-CaO center dot ZrO2 sprayed thermal barrier top coating. Mifune N; Harada Y. Kitakyushu Plant Tocalo Co Ltd, /Fukuoka 8000304//Japan/ (REPRINT); Kitakyushu Plant Tocalo Co Ltd, /Fukuoka 8000304//Japan/; Tocalo Co Ltd, Thermal Spraying Technol R & D Lab, /Kobe/Hyogo 6580013/Japan/. English. ARTICLE. 24 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900068

P. 1794-1801. Study of micro-droplet behavior for a piezoelectric inkjet printing device using a single pulse voltage pattern. Wu HC; Shan TR; Hwang WS; Lin HJ. Natl Cheng Kung Univ, Dept Mat Sci & Engn, /Tainan 70101//Taiwan/ (REPRINT); Natl Cheng Kung Univ, Dept Mat Sci & Engn, /Tainan 70101//Taiwan/; Natl United Univ, Dept Mat Sci & Engn, /Miaoli//Taiwan/. English. ARTICLE. 8 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900069

Section Heading: GLYCOBIOLOGY AND EXTRACELLULAR MATRICES

P. 25294-25298. Interactions between the cartilage oligomeric matrix protein and matrilins - Implications for matrix assembly and the pathogenesis of chondrodysplasias. Mann HH; Ozbek S; Engel J; Paulsson M; Wagener R. Univ Cologne, Ctr Biochem, Joseph Stelzmann Str 52/D-50931 Cologne//Germany/ (REPRINT); Univ Cologne, Ctr Biochem, /D-50931 Cologne//Germany/; Univ Cologne, Ctr Mol Med, /D-50931 Cologne//Germany/; Univ Basel, Div Biophys Chem, /CH-4056 Basel//Switzerland/. English. ARTICLE. 28 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900048

P. 25326-25332. Hyaluronan regulates transforming growth factor-beta 1 receptor compartmentalization. Ito T; Williams JD; Fraser DJ; Phillips AO. Univ Wales Coll Med, Inst Nephrol, /Cardiff CF14 4XN/S Glam/Wales/ (REPRINT); Univ Wales Coll Med, Inst Nephrol, /Cardiff

CF14 4XN/S Glam/Wales/. English. ARTICLE. 54 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900053

P. 25390-25399. Bioengineering of surface GD3 ganglioside for immunotargeting human melanoma cells. Zou W; Borrelli S; Gilbert M; Liu TM; Pon RA; Jennings HJ. Natl Res Council Canada, Inst Biol Sci, 100 Sussex Dr/Ottawa/ON K1A 0R6/Canada/ (REPRINT); Natl Res Council Canada, Inst Biol Sci, /Ottawa/ON K1A 0R6/Canada/. English. ARTICLE. 60 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900062

P. 25455-25463. Extracellular bone acidic glycoprotein-75 defines condensed mesenchyme regions to be mineralized and localizes with bone sialoprotein during intramembranous bone formation. Gorski JP; Wang AM; Lovitch D; Law D; Powell K; Midura RJ. Univ Missouri, Bone Biol Res Program, 650 E 25th St/Kansas City//MO/64108 (REPRINT); Univ Missouri, Bone Biol Res Program, /Kansas City//MO/64108; Univ Missouri, Div Biochem & Mol Biol, /Kansas City//MO/64108; Cleveland Clin & Fdn, Orthopaed Res Ctr, /Cleveland//OH/44195; Cleveland Clin & Fdn, Dept Biomed Engn, /Cleveland//OH/44195; Univ Missouri, Div Cell Biol & Biophys, /Kansas City//MO/64110. English. ARTICLE. 64 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900069

P. 25464-25473. Bone acidic glycoprotein-75 delineates the extracellular sites of future bone sialoprotein accumulation and apatite nucleation in osteoblastic cultures. Midura RJ; Wang AM; Lovitch D; Law D; Powell K; Gorski JP. Cleveland Clin Fdn, Dept Biomed Engn, ND20,9500 Euclid Ave/Cleveland//OH/44195 (REPRINT); Cleveland Clin Fdn, Dept Biomed Engn, /Cleveland//OH/44195; Cleveland Clin Fdn, Orthopaed Res Ctr, /Cleveland//OH/44195; Univ Missouri, Div Biochem & Mol Biol, /Kansas City//MO/64108; Univ Missouri, Dept Oral Biol, /Kansas City//MO/64108; Univ Missouri, Div Cell Biol & Biophys, /Kansas City//MO/64110. English. ARTICLE. 69 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900070

P. 25562-25566. Identification and kinetics analysis of a novel heparin-binding site (KEDK) in human tenascin-C. Jang JH; Hwang JH; Chung CP; Choung PH. Seoul Natl Univ, IBEC, 28 Yongon Dong/Seoul 110749//South Korea/ (REPRINT); Seoul Natl Univ, IBEC, /Seoul 110749//South Korea/. English. ARTICLE. 34 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900082

P. 25680-25688. Regulated expression of the pathogen receptor dendritic cell-specific intercellular adhesion molecule 3 (ICAM-3)-grabbing nonintegrin in THP-1 human leukemic cells, monocytes, and macrophages. Puig-Kroger A; Serrano-Gomez D; Caparros E; Dominguez-Soto A; Relloso M; Colmenares M; Martinez-Munoz L; Longo N; Sanchez-Sanchez N; Rincon M; Rivas L; Sanchez-Mateos P; Fernandez-Ruiz E; Corbi AL. Consejo Super Invest Cient, Ctr Invest Biol, Ramiro Maetzu 9/Madrid 28040//Spain/ (REPRINT); Consejo Super Invest Cient, Ctr Invest Biol, /Madrid 28040//Spain/; Hosp Univ Gregorio Maranon, Unidad Inmunooncol, /Madrid 28006//Spain/; Univ Vermont, Dept Med & Immunobiol, /Burlington//VT/05405. English. ARTICLE. 41 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900097

P. 25745-25754. TSG-6 modulates the interaction between hyaluronan and

cell surface CD44. Lesley J; Gal I; Mahoney DJ; Cordell MR; Rugg MS; Hyman R; Day AJ; Mikecz K. Rush Univ, Dept Orthoped Surg, 1735 W Harrison St,712 Cohn/Chicago//IL/60612 (REPRINT); Rush Univ, Dept Orthoped Surg, /Chicago//IL/60612; Rush Univ, Dept Biochem, /Chicago//IL/60612; Salk Inst, Mol & Cell Biol Lab, /San Diego//CA/92186; Univ Oxford, Immunochem Unit, /Oxford OX1 3QU//England/. English. ARTICLE. 55 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900104

P. 25789-25797. Crystal structure and mutational analysis of heparan sulfate 3-O-sulfotransferase isoform 1. Edavettal SC; Lee KA; Negishi M; Linhardt RJ; Liu J; Pedersen LC. Univ N Carolina, Div Med Chem & Nat Prod, Rm 309,Beard Hall/Chapel Hill//NC/27599 (REPRINT); Univ N Carolina, Div Med Chem & Nat Prod, /Chapel Hill//NC/27599; NIEHS, NIH, /Res Triangle Pk//NC/27709; NIEHS, NIH, /Res Triangle Pk//NC/27709; Rensselaer Polytech Inst, Dept Chem & Biol Chem, /Troy//NY/12180. English. ARTICLE. 39 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900109

P. 25883-25890. Molecular dissection of the ST8Sia IV polysialyltransferase - Distinct domains are required for neural cell adhesion molecule recognition and polysialylation. Angata K; Chan D; Thibault J; Fukuda M. Burnham Inst, Glycobiol Program, 10901 N Torrey Pines Rd/La Jolla//CA/92037 (REPRINT); Burnham Inst, Glycobiol Program, /La Jolla//CA/92037. English. ARTICLE. 56 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900120

Section Heading: LIPIDS AND LIPOPROTEINS

P. 24976-24985. Glycine 420 near the C-terminal transmembrane domain of SR-BI is critical for proper delivery and metabolism of high density lipoprotein cholesteryl ester. Parathath S; Sahoo D; Darlington YF; Peng YN; Collins HL; Rothblat GH; Williams DL; Connelly MA. SUNY Stony Brook, Dept Pharmacol Sci, /Stony Brook//NY/11794 (REPRINT); SUNY Stony Brook, Dept Pharmacol Sci, /Stony Brook//NY/11794; Childrens Hosp Philadelphia, Div Gastroenterol & Nutr, /Philadelphia//PA/19104. English. ARTICLE. 51 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900011

P. 25050-25057. Cardiac-specific knock-out of lipoprotein lipase alters plasma lipoprotein triglyceride metabolism and cardiac gene expression. Augustus A; Yagyu H; Haemmerle G; Bensadoun A; Vikramadithyan RK; Park SY; Kim JK; Zechner R; Goldberg IJ. Columbia Univ, Dept Med, 630 W 168th St/New York//NY/10032 (REPRINT); Columbia Univ, Dept Med, /New York//NY/10032; Cornell Univ, Dept Nutr, /Ithaca//NY/14850; Graz Univ, /Graz//Austria/; Yale Univ, Sect Endocrinol & Metab, /New Haven//CT/06520. English. ARTICLE. 36 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900019

P. 25101-25111. Role for mammalian neutral sphingomyelinase 2 in confluence-induced growth arrest of MCF7 cells. Marchesini N; Osta W; Bielawski J; Luberto C; Obeid LM; Hannun YA. Med Univ S Carolina, Dept Biochem & Mol Biol, 173 Ashley Ave/Charleston//SC/29425 (REPRINT); Med Univ S Carolina, Dept Biochem & Mol Biol, /Charleston//SC/29425; Ralph H Johnson Vet Adm,

/Charleston//SC/29425. English. ARTICLE. 69 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900025

P. 25164-25171. Stearoyl-CoA desaturase 1 gene expression is necessary for fructose-mediated induction of lipogenic gene expression by sterol regulatory element-binding protein-1c-dependent and -independent mechanisms. Miyazaki M; Dobrzyn A; Man WC; Chu KK; Sampath H; Kim HJ; Ntambi JN. Univ Wisconsin, Dept Biochem, 433 Babcock Dr/Madison//WI/53706 (REPRINT); Univ Wisconsin, Dept Biochem, /Madison//WI/53706; Univ Wisconsin, Dept Nutr Sci, /Madison//WI/53706. English. ARTICLE. 65 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900032

P. 25400-25410. Oxidation and transamination of the 3 ''-position of UDP-N-acetylglucosamine by enzymes from Acidithiobacillus ferrooxidans - Role in the formation of lipid a molecules with four amide-linked acyl chains. Sweet CR; Ribeiro AA; Raetz CRH. Duke Univ, Dept Biochem, POB 3711/Durham//NC/27710 (REPRINT); Duke Univ, Dept Biochem, /Durham//NC/27710; Duke Univ, NMR Spect Ctr, /Durham//NC/27710; Duke Univ, Dept Radiol, /Durham//NC/27710. English. ARTICLE. 48 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900063

P. 25411-25419. Enzymatic synthesis of lipid A molecules with four amide-linked acyl chains - LpxA acyltransferases selective for an analog of UDP-N-acetylglucosamine in which an amine replaces the 3 ''-hydroxyl group. Sweet CR; Williams AH; Karbarz MJ; Werts C; Kalb SR; Cotter RJ; Raetz CRH. Duke Univ, Dept Biochem, POB 3711/Durham//NC/27710 (REPRINT); Duke Univ, Dept Biochem, /Durham//NC/27710; Inst Pasteur, Unite Bacteriol Mol & Med, /F-75015 Paris//France/; Johns Hopkins Univ, Middle Atlantic Mass Spectrometry Lab, /Baltimore//MD/21205. English. ARTICLE. 42 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900064

P. 25420-25429. A methylated phosphate group and four amide-linked acyl chains in Leptospira interrogans lipid A - The membrane anchor of an unusual lipopolysaccharide that activates TLR2. Que-Gewirth NLS; Ribeiro AA; Kalb SR; Cotter RJ; Bulach DM; Adler B; Saint Girons I; Werts C; Raetz CRH. Duke Univ, Dept Biochem, Box 3711/Durham//NC/27710 (REPRINT); Duke Univ, Dept Biochem, /Durham//NC/27710; Duke Univ, Duke NMR Spect Ctr, /Durham//NC/27710; Duke Univ, Dept Radiol, /Durham//NC/27710; Johns Hopkins Univ, Middle Atlantic Mass Spectrometry Lab, /Baltimore//MD/21205; Monash Univ, Australian Bacterial Pathogenesis Program, /Clayton/Vic 3800/Australia/; Inst Pasteur, Unite Bacteriol Mol & Med, /F-75015 Paris//France/. English. ARTICLE. 85 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900065

Section Heading: MEMBRANE TRANSPORT, STRUCTURE, FUNCTION, AND BIOGENESIS

P. 25211-25218. ERK1/2 mediates insulin stimulation of Na,K-ATPase by phosphorylation of the alpha-subunit in human skeletal muscle cells. Al-Khalili L; Kotova O; Tsuchida H; Ehren I; Feraille E; Krook A; Chibalin AV. Karolinska Inst, Sect Integrat Physiol, Eulers Vag 4,4 Tr/SE-17177 Stockholm//Sweden/ (REPRINT); Karolinska Inst, Sect Integrat Physiol, /SE-17177 Stockholm//Sweden/; Karolinska Inst, Urol Sect, /SE-17177 Stockholm//Sweden/; Karolinska Inst, Dept

Physiol & Pharmacol, /SE-17177 Stockholm//Sweden/; Hop Cantonal Univ Geneva, Div Nephrol, /CH-1211 Geneva//Switzerland/. English. ARTICLE. 55 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900038

P. 25234-25240. Lithium-calcium exchange is mediated by a distinct potassium-independent sodium-calcium exchanger. Palty R; Ohana E; Hershfinkel M; Volokita M; Elgazar V; Beharier O; Silverman WF; Argaman M; Sekler I. Ben Gurion Univ Negev, Dept Physiol, /IL-84105 Beer Sheva//Israel/ (REPRINT); Ben Gurion Univ Negev, Dept Physiol, /IL-84105 Beer Sheva//Israel/; Ben Gurion Univ Negev, Dept Morphol, /IL-84105 Beer Sheva//Israel/; Ben Gurion Univ Negev, Zlotowski Ctr Neurosci, /IL-84105 Beer Sheva//Israel/. English. ARTICLE. 29 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900041

P. 25364-25373. Functional characterization of a second porin isoform in Drosophila melanogaster - DmPorin2 forms voltage-independent cation-selective pores. Aiello R; Messina A; Schiffler B; Benz R; Tasco G; Casadio R; De Pinto V. Univ Catania, Dept Chem Sci, Viale A Doria 6/I-95125 Catania//Italy/ (REPRINT); Univ Catania, Dept Chem Sci, /I-95125 Catania//Italy/; Univ Wurzburg, Lehrstuhl Biotechnol, /D-97074 Wurzburg//Germany/; Univ Bologna, Biocomp Unit, /I-40126 Bologna//Italy/. English. ARTICLE. 47 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900059

P. 25430-25439. AP-3-dependent mechanisms control the targeting of a chloride channel (ClC-3) in neuronal and non-neuronal cells. Salazar G; Love R; Styers ML; Werner E; Peden A; Rodriguez S; Gearing M; Wainer BH; Faundez V. Whitehead Biomed Res Bldg,615 Michael St,Rm 446, /Atlanta//GA/30322 (REPRINT); Emory Univ, Dept Cell Biol, /Atlanta//GA/30322; Emory Univ, Dept Pathol & Lab Med, /Atlanta//GA/30322; Emory Univ, Ctr Neurodegenerat Dis, /Atlanta//GA/30322; Genentech Inc, /San Francisco//CA/94080. English. ARTICLE. 52 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900066

P. 25527-25534. Folate deprivation results in the loss of breast cancer resistance protein (BCRP/ABCG2) expression - A role for BCRP in cellular folate homeostasis. Ifergan I; Shafran A; Jansen G; Hooijberg JH; Scheffer GL; Assaraf YG. Technion Israel Inst Technol, Dept Biol, /IL-32000 Haifa//Israel/ (REPRINT); Technion Israel Inst Technol, Dept Biol, /IL-32000 Haifa//Israel/; Free Univ Amsterdam, Dept Rheumatol, /NL-1081 HV Amsterdam//Netherlands/; Free Univ Amsterdam, Dept Pediat Oncol, /NL-1081 HV Amsterdam//Netherlands/; Free Univ Amsterdam, Dept Pathol, /NL-1081 HV Amsterdam//Netherlands/. English. ARTICLE. 49 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900078

P. 25582-25589. The N-terminal extracellular domain is required for polycystin-1-dependent channel activity. Babich V; Zeng WZ; Yeh BI; Ibraghimov-Beskrovanaya O; Cai YQ; Somlo S; Huang CL. Univ Texas, Div Nephrol, 5323 Harry Hines Blvd/Dallas//TX/75390 (REPRINT); Univ Texas, Div Nephrol, /Dallas//TX/75390; Genzyme Corp, /Framingham//MA/01701; Yale Univ, Nephrol Sect, /New Haven//CT/06519. English. ARTICLE. 43 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900085

P. 25598-25604. A novel hyperekplexia-causing mutation in the

pre-transmembrane segment 1 of the human glycine receptor alpha(1) subunit reduces membrane expression and impairs gating by agonists. Castaldo P; Stefanoni P; Miceli F; Coppola G; del Giudice EM; Bellini G; Pascotto A; Trudell JR; Harrison NL; Annunziato L; Taglialatela M. Univ Naples Federico II, Div Pharmacol, Via Pansini 5/I-80131 Naples//Italy/ (REPRINT); Univ Naples Federico II, Div Pharmacol, /I-80131 Naples//Italy/; Univ Naples 2, Dept Child Neuropsychiat, /I-80138 Naples//Italy/; Univ Naples 2, Dept Pediat, /I-80138 Naples//Italy/; Stanford Univ, Dept Anesthesia, /Stanford//CA/94305; Cornell Univ, Dept Anesthesiol, /New York//NY/10021; Cornell Univ, Dept Pharmacol, /New York//NY/10021. English. ARTICLE. 43 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900087

P. 25765-25773. Proreceptor dimerization is required for insulin receptor post-translational processing. Wu JJP; Guidotti G. Harvard Univ, Dept Mol & Cellular Biol, 7 Divin Ave/Cambridge//MA/02138 (REPRINT); Harvard Univ, Dept Mol & Cellular Biol, /Cambridge//MA/02138. English. ARTICLE. 19 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900106

P. 25798-25804. Isoform specificity among ankyrins - An amphipathic alpha-helix in the divergent regulatory domain of ankyrin-B interacts with the molecular co-chaperone Hdj1/Hsp40. Mohler PJ; Hoffman JA; Davis JQ; Abdi KM; Kim CR; Jones SK; Davis LH; Roberts KF; Bennett V. Duke Univ, Howard Hughes Med Inst, /Durham//NC/27710 (REPRINT); Duke Univ, Howard Hughes Med Inst, /Durham//NC/27710; Duke Univ, Dept Cell Biol, /Durham//NC/27710; Duke Univ, Dept Biochem, /Durham//NC/27710; Duke Univ, Dept Neurosci, /Durham//NC/27710. English. ARTICLE. 34 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900110

Section Heading: MECHANISMS OF SIGNAL TRANSDUCTION

P. 24929-24934. Insulin-induced activation of atypical protein kinase C, but not protein kinase B, is maintained in diabetic (ob/ob and Goto-Kakazaki) liver - Contrasting insulin signaling patterns in liver versus muscle define phenotypes of type 2 diabetic and high fat-induced insulin-resistant states. Standaert ML; Sajan MP; Miura A; Kanoh Y; Chen HC; Farese RV; Farese RV. James A Haley Vet Hosp, ACOS 151,13000 Bruce B Downs Blvd/Tampa//FL/33612 (REPRINT); James A Haley Vet Adm Med Ctr, Res Serv, /Tampa//FL/33612; Univ S Florida, Dept Internal Med, /Tampa//FL/33612; Univ Calif San Francisco, Gladstone Inst Cardiovasc Dis, /San Francisco//CA/94143; Univ Calif San Francisco, Dept Med, /San Francisco//CA/. English. ARTICLE. 35 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900006

P. 25002-25009. kappa opioid receptor interacts with Na+/H+-exchanger regulatory factor-1/ezrin-radixin-moesin-binding phosphoprotein-50 (NHERF-1/EBP50) to stimulate Na+/H+ exchange independent of G(i)/G(o) proteins. Huang P; Steplock D; Weinman EJ; Hall RA; Ding Z; Li JG; Wang YL; Liu-Chen LY. Temple Univ, Dept Pharmacol, 3420 N Broad St/Philadelphia//PA/19140 (REPRINT); Temple Univ, Dept Pharmacol, /Philadelphia//PA/19140; Temple Univ, Ctr Subst Abuse Res, /Philadelphia//PA/19140; Univ Maryland, Dept Med, /Baltimore//MD/21201; Univ Maryland, Dept Physiol, /Baltimore//MD/21201; Dept Vet Affairs Med Ctr, Med Serv, /Baltimore//MD/21201; Emory Univ, Rollins Res Ctr,

/Atlanta//GA/30322. English. ARTICLE. 53 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900014

P. 25024-25038. Arachidonic acid release from mammalian cells transfected with human groups IIA and X secreted phospholipase A(2) occurs predominantly during the secretory process and with the involvement of cytosolic phospholipase A(2)-alpha. Mounier CM; Ghomashchi F; Lindsay MR; James S; Singer AG; Parton RG; Gelb MH. Univ Washington, Dept Chem, Campus Box 351700/Seattle//WA/98195 (REPRINT); Univ Washington, Dept Chem, /Seattle//WA/98195; Univ Washington, Dept Biochem, /Seattle//WA/98195; Univ Queensland, Inst Mol Biosci, /Brisbane/Qld 4072/Australia/; Univ Queensland, Ctr Microscopy & Microanal, /Brisbane/Qld 4072/Australia/; Univ Queensland, Sch Biomed Sci, /Brisbane/Qld 4072/Australia/. English. ARTICLE. 59 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900017

P. 25039-25049. Both insulin signaling defects in the liver and obesity contribute to insulin resistance and cause diabetes in Irs2(-/-) mice. Suzuki R; Tobe K; Aoyama M; Inoue A; Sakamoto K; Yamauchi T; Kamon J; Kubota N; Terauchi Y; Yoshimatsu H; Matsuhisa M; Nagasaka S; Ogata H; Tokuyama K; Nagai R; Kadowaki T. Univ Tokyo, Bunkyo Ku, 7-3-1 Hongo/Tokyo 1138655//Japan/ (REPRINT); Univ Tokyo, Bunkyo Ku, /Tokyo 1138655//Japan/; Japan Sci & Technol Corp, CREST, /Kawaguchi 3320012//Japan/; Oita Med Univ, Dept Internal Med, /Oita 8795593//Japan/; Osaka Univ, Dept Internal Med & Therapeut, /Suita/Osaka 5650871/Japan/; Jichi Med Sch, Div Endocrinol & Metab, /Minami Kawachi/Tochigi 3290498/Japan/; Univ Tsukuba, Grad Sch Comprehens Human Sci, /Tsukuba/Ibaraki 3058577/Japan/. English. ARTICLE. 58 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900018

P. 25134-25142. Targeting Rac1 by the Yersinia effector protein YopE inhibits caspase-1-mediated maturation and release of interleukin-1 beta. Schotte P; Denecker G; Van den Broeke A; Vandenabeele P; Cornelis GR; Beyaert R. State Univ Ghent, Unit Mol Signal Transduct Inflammat, Technol Pk 927/B-9052 Ghent//Belgium/ (REPRINT); State Univ Ghent, Unit Mol Signal Transduct Inflammat, /B-9052 Ghent//Belgium/; State Univ Ghent, Unit Mol Signalling & Cell Death, /B-9052 Ghent//Belgium/; Univ Basel, Div Mol Microbiol, /CH-4056 Basel//Switzerland/. English. ARTICLE. 55 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900028

P. 25149-25156. Caspase-mediated cleavage of insulin receptor substrate. Green KA; Naylor MJ; Lowe ET; Wang PB; Marshman E; Streuli CH. Univ Manchester, Sch Biol Sci, Smith Bldg,Oxford Rd/Manchester M13 9PT/Lancs/England/ (REPRINT); Univ Manchester, Sch Biol Sci, /Manchester M13 9PT/Lancs/England/. English. ARTICLE. 68 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900030

P. 25157-25163. Protein kinase C-zeta-induced phosphorylation of Ser(318) in insulin receptor substrate-1 (IRS-1) attenuates the interaction with the insulin receptor and the tyrosine phosphorylation of IRS-1. Moeschel K; Beck A; Weigert C; Lammers R; Kalbacher H; Voelter W; Schleicher ED; Haring HU; Lehmann R. Univ Tubingen Hosp, Dept Internal Med Endocrinol Metab Pathobiochem &, Otfried Muller Str 10/D-72076 Tubingen//Germany/ (REPRINT); Univ Tubingen Hosp, Dept Internal Med Endocrinol Metab Pathobiochem &, /D-72076 Tubingen//Germany/; Univ Tubingen, Dept Phys Biochem,

/D-72076 Tubingen//Germany/. English. ARTICLE. 25 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900031

P. 25179-25188. MEK is a key modulator for TLR5-induced interleukin-8 and MIP3 alpha gene expression in non-transformed human colonic epithelial cells. Rhee SH; Keates AC; Moyer MP; Pothoulakis C. Harvard Univ, Div Gastroenterol,Gastrointestinal Neuropeptide C, Dana 601,330 Brookline Ave/Boston//MA/02215 (REPRINT); Harvard Univ, Div Gastroenterol,Gastrointestinal Neuropeptide C, /Boston//MA/02215; INCELL Corp, /San Antonio//TX/79249. English. ARTICLE. 43 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900034

P. 25189-25195. Dual receptors and distinct pathways mediate interleukin-1 receptor-associated kinase degradation in response to lipopolysaccharide - Involvement of CD14/TLR4, CR3, and phosphatidylinositol 3-kinase. Sanaa N; Hmama Z; Reiner NE. Univ British Columbia, Div Infect Dis, Rm 452D,2733 Heather St/Vancouver/BC V5Z 3J5/Canada/ (REPRINT); Univ British Columbia, Div Infect Dis, /Vancouver/BC V5Z 3J5/Canada/; Univ British Columbia, Dept Microbiol & Immunol, /Vancouver/BC V5Z 3J5/Canada/; Univ British Columbia, Fac Sci, /Vancouver/BC V5Z 3J5/Canada/; Vancouver Coastal Hlth Res Inst, /Vancouver/BC V5Z 3J5/Canada/. English. ARTICLE. 60 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900035

P. 25196-25203. Interleukin 4 regulates phosphorylation of serine 756 in the transactivation domain of Stat6 - Roles for multiple phosphorylation sites and Stat6 function. Wang YL; Malabarba MG; Nagy ZS; Kirken RA. Univ Texas, Dept Integrat Biol & Pharmacol, Med Sci Bldg,Rm 4-218/Houston//TX/77030 (REPRINT); Univ Texas, Dept Integrat Biol & Pharmacol, /Houston//TX/77030; European Inst Oncol, Dept Expt Oncol, /I-20141 Milan//Italy/. English. ARTICLE. 59 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900036

P. 25219-25225. Arachidonic acid released by phospholipase A(2) activation triggers Ca2+-dependent apoptosis through the mitochondrial pathway. Penzo D; Petronilli V; Angelin A; Cusan C; Colonna R; Scorrano L; Pagano F; Prato M; Di Lisa F; Bernardi P. Univ Padua, Dept Biomed Sci, Viale Giuseppe Colombo 3/I-35121 Padua//Italy/ (REPRINT); Univ Padua, Dept Biomed Sci, /I-35121 Padua//Italy/; Univ Padua, Dept Biol Chem, /I-35121 Padua//Italy/; Univ Trieste, Dept Pharmaceut Sci, /I-34127 Trieste//Italy/; Venetian Inst Mol Med, Dulbecco Telethon Inst, /I-35129 Padua//Italy/. English. ARTICLE. 52 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900039

P. 25226-25233. Requirement for C-terminal sequences in regulation of Ect2 guanine nucleotide exchange specificity and transformation. Solski PA; Wilder RS; Rossman KL; Sondek J; Cox AD; Campbell SL; Der CJ. Univ N Carolina, Dept Pharmacol, /Chapel Hill//NC/27599 (REPRINT); Univ N Carolina, Dept Pharmacol, /Chapel Hill//NC/27599; Univ N Carolina, Dept Biochem & Biophys, /Chapel Hill//NC/27599; Univ N Carolina, Dept Radiat Oncol, /Chapel Hill//NC/27599. English. ARTICLE. 40 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900040

P. 25260-25267. P27(Kip1) stabilization and G(1) arrest by

1,25-dihydroxyvitamin D-3 in ovarian cancer cells mediated through down-regulation of cyclin E/cyclin-dependent kinase 2 and Skp1-Cullin-F-box Protein/Skp2 ubiquitin ligase. Li PF; Li CR; Zhao XH; Zhang XH; Nicosia SV; Bai WL. Univ S Florida, Dept Pathol, 12901 Bruce B Downs Blvd,MDC 11/Tampa//FL/33612 (REPRINT); Univ S Florida, Dept Pathol, /Tampa//FL/33612; Univ S Florida, Dept Interdisciplinary Oncol, /Tampa//FL/33612; H Lee Moffitt Canc Ctr, Program Mol Oncol, /Tampa//FL/33612; H Lee Moffitt Canc Ctr, Program Drug Discovery, /Tampa//FL/33612. English. ARTICLE. 45 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900044

P. 25284-25293. Interaction between the aryl hydrocarbon receptor and retinoic acid pathways increases matrix metalloproteinase-1 expression in keratinocytes. Murphy KA; Villano CM; Dorn R; White LA. Rutgers State Univ, Dept Biochem & Microbiol, /New Brunswick//NJ/08901 (REPRINT); Rutgers State Univ, Dept Biochem & Microbiol, /New Brunswick//NJ/08901. English. ARTICLE. 55 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900047

P. 25299-25306. Contribution of protease-activated receptors 1 and 4 and glycoprotein Ib-IX-V in the G(i)-independent activation of platelet Rap1B by thrombin. Lova P; Campus F; Lombardi R; Cattaneo M; Sinigaglia F; Balduini C; Torti M. Univ Pavia, Ctr Excellence Appl Biol, Via Bassi 21/I-27100 Pavia//Italy/ (REPRINT); Univ Pavia, Ctr Excellence Appl Biol, /I-27100 Pavia//Italy/; Univ Milan, Unit Hematol & Thrombosis, /I-20142 Milan//Italy/; Univ Milan, A Bianchi Bonomi Hemophilia & Thrombosis Ctr, /I-20122 Milan//Italy/; Univ A Avogadro, Dept Med Sci, /I-28100 Novara//Italy/. English. ARTICLE. 44 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900049

P. 25313-25319. c-Fos is a mediator of the c-Myc-induced apoptotic signaling in serum-deprived hepatoma cells via the p38 mitogen-activated protein kinase pathway. Karla N; Kumar V. Int Ctr Genet Engn & Biotechnol, Virol Grp, POB 10504,Aruna Asaf Ali Marg/New Delhi 110067//India/ (REPRINT); Int Ctr Genet Engn & Biotechnol, Virol Grp, /New Delhi 110067//India/. English. ARTICLE. 68 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900051

P. 25345-25352. Role of the p38 mitogen-activated protein kinase pathway in the generation of the effects of imatinib mesylate (STI571) in BCR-ABL-expressing cells. Parmar S; Katsoulidis E; Verma A; Li Y; Sassano A; Lal L; Majchrzak B; Ravandi F; Tallman MS; Fish EN; Platanias LC. Northwestern Univ, Robert H Lurie Comprehens Canc Ctr, 710 N Fairbanks St,Olson 8250/Chicago//IL/60611 (REPRINT); Northwestern Univ, Robert H Lurie Comprehens Canc Ctr, /Chicago//IL/60611; Northwestern Univ, Div Hematol Oncol, /Chicago//IL/60611; Univ Illinois, Hematol Oncol Sect, /Chicago//IL/60607; Univ Toronto, Univ Network, /Toronto/ON M5G 2M1/Canada/; Univ Toronto, Dept Immunol, /Toronto/ON M5G 2M1/Canada/. English. ARTICLE. 72 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900056

P. 25374-25380. Growth factor receptor-bound protein 2 interaction with the tyrosine-phosphorylated tail of amyloid beta precursor protein is mediated by its Src homology 2 domain. Zhou DW; Noviello C; D'Ambrosio C; Scaloni A; D'Adamio L. Albert Einstein Coll Med, Dept Microbiol & Immunol, 1300 Morris Pk

Ave/Bronx//NY/10461 (REPRINT); Albert Einstein Coll Med, Dept Microbiol & Immunol, /Bronx//NY/10461; Univ Naples Federico II, Ceinge Biotecnol Avanzate, /I-80145 Naples//Italy/; CNR, Proteom & Mass Spectrometry Lab, /I-80147 Naples//Italy/. English. ARTICLE. 68 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900060

P. 25503-25510. Human chorionic gonadotropin decreases proliferation and invasion of breast cancer MCF-7 cells by inhibiting NF-kappa B and AP-1 activation. Rao CV; Li X; Manna SK; Lei ZM; Aggarwal BB. Univ Louisville, Div Res, 438 MDR Bldg,511 S Floyd St/Louisville//KY/40292 (REPRINT); Univ Louisville, Div Res, /Louisville//KY/40292; Univ Texas, Cytokine Res Lab, /Houston//TX/77030. English. ARTICLE. 55 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900075

P. 25535-25543. Doxorubicin induces apoptosis in normal and tumor cells via distinctly different mechanisms - Intermediacy of H2O2- and p53-dependent pathways. Wang SW; Konorev EA; Kotamraju S; Joseph J; Kalivendi S; Kalyanaraman B. Med Coll Wisconsin, Dept Biophys, 8701 Watertown Plank Rd/Milwaukee//WI/53226 (REPRINT); Med Coll Wisconsin, Dept Biophys, /Milwaukee//WI/53226; Med Coll Wisconsin, Free Rad Res Ctr, /Milwaukee//WI/53226. English. ARTICLE. 46 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900079

P. 25590-25597. beta-arrestin-dependent constitutive internalization of the human chemokine decoy receptor D6. Galliera E; Jala VR; Trent JO; Bonecchi R; Signorelli P; Lefkowitz RJ; Mantovani A; Locati M; Haribabu B. Univ Louisville Hlth Sci, James Fraham Brown Canc Ctr, Delia Baxter Bldg 119 B,580 Preston St/Louisville//KY/40202 (REPRINT); Univ Louisville Hlth Sci, James Fraham Brown Canc Ctr, /Louisville//KY/40202; Univ Louisville Hlth Sci, Dept Microbiol & Immunol, /Louisville//KY/40202; Univ Louisville Hlth Sci, Dept Med, /Louisville//KY/40202; Univ Milan, Ctr Eccellenza Innovaz Diagnost & Terapeut, /I-20133 Milan//Italy/; Duke Univ, Howard Hughes Med Inst, /Durham//NC/27710; Duke Univ, Dept Biochem, /Durham//NC/27710. English. ARTICLE. 42 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900086

P. 25605-25613. Tuberous sclerosis complex 2 gene product interacts with human SMAD proteins - A molecular link of two tumor suppressor pathways. Birchenall-Roberts MC; Fu T; Bang OS; Dambach M; Resau JH; Sadowski CL; Bertolette DC; Lee HJ; Kim SJ; Ruscetti FW. NCI, Basic Res Program, POB B,Bldg 567-259/Frederick//MD/21702 (REPRINT); NCI, Basic Res Program, /Frederick//MD/21702; Van Andel Inst, /Grand Rapids//MI/49506; NCI Frederick, Expt Immunol Lab, /Frederick//MD/21702; NCI, NIH, /Bethesda//MD/20892. English. ARTICLE. 41 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900088

P. 25646-25652. Cross-talk with Ca2+ influx does not underlie the role of extracellular signal-regulated kinases in cytotoxic T lymphocyte lytic granule exocytosis. Fierro AF; Wurth GA; Zweifach A. Univ Colorado, Dept Physiol & Biophys, 4200 E 9th Ave/Denver//CO/80262 (REPRINT); Univ Colorado, Dept Physiol & Biophys, /Denver//CO/80262. English. ARTICLE. 49 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900093

P. 25665-25672. Regulated exocytosis contributes to protein kinase C

potentiation of vanilloid receptor activity. Morenilla-Palao C; Planells-Cases R; Garcia-Sanz N; Ferrer-Montiel A. Univ Miguel Hernandez, Inst Biol Mol & Celular, Ave Ferrocarril S-N/Elche/Alicante/Spain/ (REPRINT); Univ Miguel Hernandez, Inst Biol Mol & Celular, /Elche/Alicante/Spain/. English. ARTICLE. 42 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221827900095

P. 1802-1806. Formation of new Ti-based metallic glassy alloys. Ma CL; Ishihara S; Soejima H; Nishiyama N; Inoue A. RIMCOF, /Sendai/Miyagi 9808577/Japan/ (REPRINT); RIMCOF, /Sendai/Miyagi 9808577/Japan/; Tohoku Univ, Mat Res Inst, /Sendai/Miyagi 9808577/Japan/. English. ARTICLE. 23 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900070

Section Heading: RAPID PUBLICATION

P. 1807-1810. Bending properties of nanocrystalline Ni-18at% W alloy produced by electrodeposition. Hosokawa H; Yamasaki T; Sugamoto N; Tomizawa M; Shimojima K; Mabuchi M. AIST, Inst Struct & Engn Mat, /Nagoya/Aichi 4638560/Japan/ (REPRINT); AIST, Inst Struct & Engn Mat, /Nagoya/Aichi 4638560/Japan/; Himeji Inst Technol, Dept Mat Sci & Engn, /Himeji/Hyogo 6712201/Japan/. English. ARTICLE. 14 REFERENCES. ABSTRACT AVAILABLE. Document Delivery no: 000221863900071

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Set     Items   Description
S1      22282   (PORCINE OR SWINE OR PIG OR HOG)(S)(PLASMA OR ALBUMIN OR B-
             LOOD(W)MEAL) OR SBM? ? OR PBM? ? OR AP920 OR AP(W)920
S2        103   S1 AND (CRUSTACEA? OR PRAWN? ? OR LOBSTER? ? OR CRAB? ? OR
             SHRIMP OR OSTRACOD? OR SHELLFISH? OR SHELL(W)FISH? OR HOMARID-
             AE OR HOMARUS OR NEPHROPIDAE OR BRACHYURA OR PAGURUS OR ANOMU-
             RA OR DECAPODA OR PENAEUS)
S3         30   S2 AND (POWDER? OR CRUST??)
S4         16   S3 AND IMMUN?
S5         14   S3 AND (IMMUNOL? OR IMMUNIT? OR IMMUNOSTIMUL? OR IMMUNO(W)-
             STIMUL?)
S6         37   S2 AND (IMMUNOL? OR IMMUNIT? OR IMMUNOSTIMUL? OR IMMUNO(W)-
             STIMUL?)
S7         53   S3 OR S6
S8         46   RD (unique items)
S9       7749   (PORCINE OR SWINE OR PIG OR HOG)(S)(PLASMA OR ALBUMIN OR B-
             LOOD(W)MEAL) OR (SBM? ? OR PBM? ?)(10N)(BLOOD(W)MEAL) OR AP920
              OR AP(W)920
S10        51   S9 AND (CRUSTACEA? OR PRAWN? ? OR LOBSTER? ? OR CRAB? ? OR
             SHRIMP OR OSTRACOD? OR SHELLFISH? OR SHELL(W)FISH? OR HOMARID-
             AE OR HOMARUS OR NEPHROPIDAE OR BRACHYURA OR PAGURUS OR ANOMU-
             RA OR DECAPODA OR PENAEUS)
S11        16   S10 AND (POWDER? OR CRUST??)
S12        14   RD (unique items)
S13        21   S10/TI,DE,MAJ
S14        19   S13 NOT S11
S15         3   RD (unique items)
S16      4685   AU=(HATTORI, T? OR HATTORI T? OR TSUNEO, H? OR TSUNEO H?)
S17     10442   AU=(TAKAHASHI, Y? OR TAKAHASHI Y? OR YUKINORI, T? OR YUKIN-
             ORI T?)
S18       216   AU=(TACHIKAWA, Y? OR TACHIKAWA Y? OR YOSHIHIRO, T? OR YOSH-
             IHIRO T?)
S19         0   S16 AND S17 AND S18
S20       148   S16 AND (S17 OR S18)
S21         1   S17 AND S18
S22         0   (S16 OR S17 OR S18 OR S20) AND S10
S23         1   S21 NOT (S11 OR S14)
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